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# PROVINCE OF ONTARIO



## NUCLEAR EMERGENCY PLAN

### PART VI (ENRICO FERMI 2)







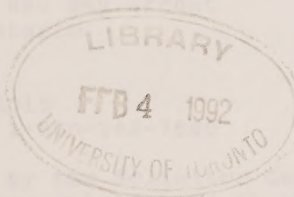
Executive Council

## Order in Council

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On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and concurrence of the Executive Council, orders that

the appended document entitled "Province of Ontario Nuclear Emergency Plan Part VI - Enrico Fermi 2 Nuclear Emergency Plan" respecting emergencies arising in connection with the Enrico Fermi 2 nuclear facility be adopted as Part VI of the Province of Ontario Nuclear Emergency Plan, Order in Council numbered 1618/86 formulated under section 8 of the Emergency Plans Act, 1983, being chapter 30.



Recommended

Solicitor General

Concurred

Chairman

Approved

and Ordered October 5, 1989

Date

Administrator of the Government



## FOREWORD

The Province of Ontario Nuclear Emergency Plan parts I through VIII, have been developed pursuant to Section 8 of the Emergency Plans Act, 1983. Numbered copies of the Plan and its various parts are distributed according to the Distribution List appended to the Part I Master Plan. Holders of these numbered copies are responsible for keeping them updated by incorporating numbered amendments, which will be issued from time to time.

Additional copies of the parts of the Nuclear Emergency Plan are available, for official use, from Emergency Planning Ontario, and for others, in Toronto, at:

Government of Ontario Bookstore  
Main Floor, 880 Bay Street

(416) 965-2054

or, from outside Toronto, through:

Ministry of Government Services  
Mail Order Service  
5th Floor, 880 Bay Street  
Toronto, Ontario  
M7A 1N8

(416) 965-6015  
Toll-free: 1-800-268-7540

This plan is administered by the Solicitor General of Ontario. All comments and suggestions relating to it should be directed to:

Ministry of the Solicitor General  
Emergency Planning Ontario  
5th Floor, 27 Carlton Street  
Toronto, Ontario  
M5B 1L2

(416) 965-6708

Copies of the plan have been made available to the relevant area public libraries for the information of the public. A copy of the plan is also available to the public for inspection and copying during ordinary business hours at the offices of Emergency Planning Ontario at the above address.



Copy No. \_\_\_\_\_


## PROVINCE OF ONTARIO



## NUCLEAR EMERGENCY PLAN

### PART VI - ENRICO FERMI 2 NUCLEAR EMERGENCY PLAN





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PROVINCE OF ONTARIO

NUCLEAR EMERGENCY PLAN

PART VI - ENRICO FERMI 2 NUCLEAR EMERGENCY PLAN

TABLE OF CONTENTS

		<u>Page</u>
	ACRONYMS & ABBREVIATIONS	v
Chapter 1	GENERAL	1
	1.1 Aim	1
	1.2 Scope	1
	1.3 Municipal Plan	1
Chapter 2	PLAN DATA AND ORGANIZATION	2
	2.1 Enrico Fermi 2	2
	2.2 Planning Zones	2
	2.3 Response Sectors	3
	2.4 Planning Data	3
	2.5 Provincial Emergency Organization	3
	2.6 Ontario Hydro	5
	2.7 Michigan State Emergency Organization	5
	2.8 Emergency Facilities	6
	2.9 Telecommunications	6
Chapter 3	NOTIFICATION	11
	3.1 General	11
	3.2 Initial Notification	11
	3.3 Internal Notification and Activation	12
	3.4 External Notification	14
	3.5 Public Notification	15
Chapter 4	OPERATIONS - PHASE 1	17
	4.1 Introduction	17
	4.2 Response to Notification	18
	4.3 Immediate Actions	18
	4.4 Provincial Assumption of Control	18
	4.5 Declaration of Provincial Emergency	19
	4.6 Ontario Liaison Team	19
	4.7 OLT Assumption of Direction	20
	4.8 Protective Measures by the Province	21
	4.9 Evacuations	22
	4.10 Forward Provincial Operations Centre	23
	4.11 Plume Monitoring	23
	4.12 Ingestion Control Monitoring	24
	4.13 Transition to Phase 2	24
	4.14 Emergency Worker Safety	24

<b>CHAPTER 5</b>	<b>OPERATIONS - PHASE 2</b>	<b>30</b>
5.1	General	30
5.2	Overview	30
5.3	Area of Operations	31
5.4	Field Monitoring	31
5.5	Ingestion Control Operations	31
5.6	Restoration Operations	31
5.7	Municipal Restoration Operations	32
5.8	Emergency Worker Safety	32
5.9	Termination of Emergency	32
<b>CHAPTER 6</b>	<b>OPERATIONS - LIQUID EMISSION</b>	<b>33</b>
6.1	General	33
6.2	Notification and Response	33
6.3	Activation for Phase 2 Operations	33
6.4	Response - Provincial: Phase 2	34
6.5	Response - Municipal	35
6.6	Operations	35
6.7	Emergency Information	36
<b>CHAPTER 7</b>	<b>EMERGENCY INFORMATION &amp; PUBLIC DIRECTION</b>	<b>37</b>
7.1	General	37
7.2	Designated Media	37
7.3	Roles & Responsibilities	37
7.4	Public Action Directives	38

APPENDICES

APPENDIX 1	RESPONSE SECTOR BOUNDARIES	40
APPENDIX 2	PLANNING DATA	41
APPENDIX 3	ALERTING AND LEAD TIMES	42
APPENDIX 4	EVACUATION - OUTLINE PLAN AND TIMES	43
APPENDIX 5	BOBLO ISLAND	46
	Annex A - Evacuation	47
	Annex B - Planning Data	49
APPENDIX 6	EMERGENCY FACILITIES - LOCATIONS	51
APPENDIX 7	TELECOMMUNICATIONS	53
	Annex A - Ontario Government Private Telephone Network	54
	Annex B - Radio Links	55
APPENDIX 8	ONTARIO LIAISON TEAM	56
	Annex A - Ontario Liaison Team	57
	Annex B - Helicopter Landing Site - Monroe	64
	Annex C - Helicopter Landing Site - Lansing	65
APPENDIX 9	NOTIFICATION	66
	Annex A - Notification Procedure	67
	Annex B - Notification List #1 Initiation of Notification	69
	Annex C - Notification List #2 Operations Group	70
	Annex D - Notification List #3 Technical Group	71
	Annex E - Notification List #4 External Notification	72
	Annex F - Notification List #6 Ontario Liaison Team	73
APPENDIX 10	REVENUE CANADA CUSTOMS AND EXCISE GOODS FOR EMERGENCY USE REMISSION ORDER	74
	Annex A - Instructions	75
	Annex B - Contact List	76
	Annex C - Goods For Emergency Use Remission Order	77
APPENDIX 11	METRIC CONVERSION CHART	80



FIGURES

1	BOILING WATER REACTOR	7
2	PRIMARY ZONE AND RESPONSE SECTORS	8
3	SECONDARY ZONE AND SUB-SECTORS	9
4	MICHIGAN STATE EMERGENCY ORGANIZATION	10

TABLES

4.1	IMMEDIATE ACTIONS IN RESPONSE TO NOTIFICATION	26
4.2	PROTECTIVE MEASURES	29

GLOSSARY

See Provincial Nuclear Emergency Plan, Part I, Appendix 14

DISTRIBUTION

As per Distribution List, Provincial Nuclear Emergency Plan, Part I.

ACRONYMS & ABBREVIATIONS

AAA	- Automobile Association of America
AECB	- Atomic Energy Control Board
AECL	- Atomic Energy of Canada Limited
BNGS	- Bruce Nuclear Generating Station
BNPD	- Bruce Nuclear Power Development
CANDU	- the name of the Canadian developed nuclear power reactor system (from <u>C</u> anada <u>D</u> euterium <u>U</u> ranium)
CEPO	- Coordinator, Emergency Planning Ontario
COMSONT	- Communications Ontario (an amateur radio organization)
CRNL	- Chalk River Nuclear Laboratories
DEL	- Derived Emission Limit
DNGS	- Darlington Nuclear Generating Station
DOE	- Department of Energy, USA
DRL	- Derived Release Limit
ECC	- Exposure Control Centre
ECDU	- Exposure Control/Decontamination Unit
EOF	- Emergency Operations Facility
E.P.Ont.	- Emergency Planning Ontario
ExecGroup	- Executive-Advisory Group
FHQ	- Field Headquarters
FNECC	- Federal Nuclear Emergency Control Centre

ACRONYMS & ABBREVIATIONS (cont'd)

FRMAC	- Federal Radiological Monitoring & Assessment Centre
InfoCentre	- Information Centre
InfoGroup	- Information Group
IMO	- Ingestion Monitoring Organization
IMCG	- Ingestion Monitoring Control Group
JPIC	- Joint Public Information Centre
JTCC	- Joint Traffic Control Centre
KI	- Potassium Iodide
km	- Kilometer
LOCA	- Loss-of-Coolant Accident
MCC	- Ministry of Culture and Communications
MCG	- Municipal Control Group
MCSS	- Ministry of Community & Social Services
MDU	- Monitoring & Decontamination Unit
Met	- Meteorology, meteorological
MNR	- Ministry of Natural Resources
MOE	- Ministry of the Environment
MOH	- Ministry of Health
MOL	- Ministry of Labour
MSG	- Ministry of the Solicitor General
MTO	- Ministry of Transportation, Ontario
NRC	- Nuclear Regulatory Commission, USA
OH	- Ontario Hydro



ACRONYMS & ABBREVIATIONS (cont'd)

OLT	- Ontario Liaison Team
OMAF	- Ontario Ministry of Agriculture and Food
OpsCentre	- Operations Centre
OpsGroup	- Operations Group
PAD	- Public Action Directive
PAL	- Protective Action Level
PNGS	- Pickering Nuclear Generating Station
PTAC	- Phase 2 Advisory Committee
PZ	- Primary Zone
rad	- See definition of Absorbed Dose in Glossary, Part I
rem	- See definition of Dose Equivalent in Glossary, Part I
RET	- Radiological Emergency Team
SEOC	- State Emergency Operations Centre
TechGroup	- Technical Group
Telecom	- Telecommunications
TLD	- Thermoluminescent Dosimeter



## CHAPTER 1

### GENERAL

#### **1.1 Aim**

The aim of Part VI of the Provincial Nuclear Emergency Plan is to prescribe the measures that shall be undertaken to deal with a nuclear emergency caused by the Enrico Fermi 2 nuclear plant in Monroe County, Michigan, U.S.A.

#### **1.2 Scope**

- 1.2.1 This plan deals mainly with actions at the Provincial level and shall be supplemented by the appropriate municipal plan (1.3 below). This plan shall also be read and applied in the context of Part I of the Nuclear Emergency Plan: The Provincial Master Plan.
- 1.2.2 This Part VI Plan, together with the Part I Provincial Plan, are referred to as "the Provincial Plan" in this document.

#### **1.3 Municipal Plan**

- 1.3.1 The Township of Malden and the Town of Amherstburg are the designated municipalities with respect to the Enrico Fermi 2 nuclear plant (Provincial Plan, Part I, Appendix 2). The Township of Anderdon has joined with these two municipalities in developing a nuclear emergency response plan.
- 1.3.2 A joint municipal plan shall be made for an Enrico Fermi 2 nuclear emergency, as per the Provincial Plan, Part I, Chapter 1. This plan shall cover the offsite emergency response arrangements and actions of the designated municipalities, the Township of Anderdon, appropriate county departments, appropriate local boards, and the local police forces. This plan is referred to as "the municipal plan" in this document.
- 1.3.3 In this document, the terms "municipal" and "municipality" shall include, unless the context indicates otherwise, the designated municipalities (paragraph 1.3.1 above), the Township of Anderdon, as well as the county departments, local boards and local police forces whose area of operation includes the area covered by the municipal plan.



## CHAPTER 2

### PLAN DATA AND ORGANIZATION

#### 2.1 Enrico Fermi 2

- 2.1.1 The Enrico Fermi nuclear facility is located at latitude 41° 57' 48" N and longitude 83° 15' 31" W, immediately to the North of Point Aux Peaux on Lake Erie in Monroe County, Michigan, U.S.A. It is approximately 40 km (25 miles) SW of Detroit.
- 2.1.2 Unit 1 at the facility was an experimental fast-breeder reactor, which has been decommissioned for many years. Unit 2 is a General Electric Boiling Water Reactor of 1093 MWe power with a Mark 1 containment. Figure 1 is a schematic outline of a Boiling Water Reactor (page 7).

#### 2.2 Planning Zones

##### 2.2.1 Primary Zone

The Primary Zone for Enrico Fermi 2 includes the area of Essex County at a radius of approximately 21-24 km (12.6-14.6 miles) from the plant, and contains the Town of Amherstburg, parts of Malden Township, and the Holiday Beach Park. See Figure 2 (page 8), and Appendix 1 (page 40) for the exact boundaries of the Zone.

The Primary Zone is the area within which it would be prudent to plan and prepare for taking Plume Exposure Control measures, such as sheltering and evacuation.

##### 2.2.2 Secondary Zone

The Secondary Zone is an arc of approximately 80 km (50 miles) in radius encompassing the whole of Essex County and islands in Lake Erie including North Harbour Island, Hen Island and Pelee Island. Figure 3 (page 9) illustrates the Secondary Zone as well as its sub-zones and sub-sectors.

The Secondary Zone is the area within which it would be prudent to plan and prepare for taking Ingestion Control measures, such as banning consumption of contaminated food items.

## 2.3 Response Sectors

2.3.1 The Primary Zone for Enrico Fermi 2 is divided into 11 Response Sectors which lie as follows:

- (a) Malden Township - Sectors 1-5
- (b) Town of Amherstburg - Sectors 6 & 7
- (c) Boblo Island - Sector 8
- (d) Holiday Beach Park - Sector 9
- (e) Lake Erie and the Detroit River - Sectors 10 & 11

2.3.2 The boundaries of the Response Sectors are shown on Figure 2 (page 8), and are detailed in Appendix 1 (page 40).

## 2.4 Planning Data

### 2.4.1 Population

Estimates are contained in Appendix 2 (page 41).

### 2.4.2 Institutions

Data on schools, special care institutions, etc are contained in Appendix 2 (page 41).

### 2.4.3 Alerting and Lead Times

These are given for each Response Sector in Appendix 3 (page 42). Also refer to paragraph 3.5.3 (page 16).

### 2.4.4 Evacuation Data

Estimates of the transportation and the time required for evacuation of each Response Sector are contained in Appendix 4 (page 43).

## 2.5 Provincial Emergency Organization

The organization prescribed in the Provincial Plan, Part I, shall function for a Fermi 2 emergency with the following modifications:

- (a) An Ontario Liaison Team (see 2.5.1 below) shall be sent to the State of Michigan.

- (b) In case of a major accident involving large-scale evacuations etc, it may be considered appropriate to establish a Forward Provincial Operations Centre (see 2.5.2 below) in Essex County during Phase 1.

2.5.1 Ontario Liaison Team

It shall consist of:

Head, Ontario Liaison Team  
Operations Officer  
Technical Officer  
Information Officers (2)  
Reliefs for the initial incumbents

2.5.2 Forward Provincial Operations Centre

It shall consist of the following elements of the Provincial Operations Centre, who shall be replaced, if so required, in the Toronto location by their alternates:

Executive Director  
Operations Group  
Liaison Group  
Some support staff

- 2.5.3 The following regional/district/area offices of Provincial ministries shall be prepared to respond to the emergency and provide the necessary assistance to the designated municipalities, as required by the Provincial Plan (for details, see Appendix 8 of Part I), the municipal plan, or as directed by their respective ministries:

(a) Agriculture and Food

Essex Office  
Leamington Office  
London Office  
Woodstock Office

(b) Community and Social Services

Southwest Region Office  
Windsor Area Office

(c) Environment

Southwestern Region Office  
Windsor District Office

(d) Health

Southwest Region Office  
Windsor Central Ambulance  
Communications Centre  
Windsor Provincial Ambulance Service

(e) Ministry of Natural Resources

Southwestern Region Office  
Chatham District Office

(f) Solicitor General (Ontario Provincial Police)

No. 1 District OPP

(g) Transportation

District No. 1 (Chatham)

2.6 Ontario Hydro

Ontario Hydro has agreed to provide the following assistance to the Province in the event of a Fermi emergency:

- (a) Plume monitoring within the organizational context of the Ingestion Monitoring Organization.
- (b) Setting up, staffing and providing the necessary equipment at the Exposure Control/Decontamination Units.
- (c) Staff for the Local Information Centre, including the Manager.
- (d) KI pills from Ontario Hydro stocks.

2.7 Michigan State Emergency Organization

See Figure 4 (page 10).

## 2.8 Emergency Facilities

The various emergency centres and facilities required to be established under this plan will be located as shown in Appendix 6 (page 51). These locations have been selected by the municipalities and organizations concerned.

## 2.9 Telecommunications

2.9.1 The telecommunication links to be established, or which are available for use, in an Enrico Fermi 2 emergency, are shown in Appendix 7 (page 53).

2.9.2 All organizations and agencies involved in responding to an Enrico Fermi 2 emergency shall ensure that those of their essential telephones which are needed to make outgoing calls during an emergency are covered by the Line Load Control program.



FIGURE 1 - BOILING WATER REACTOR

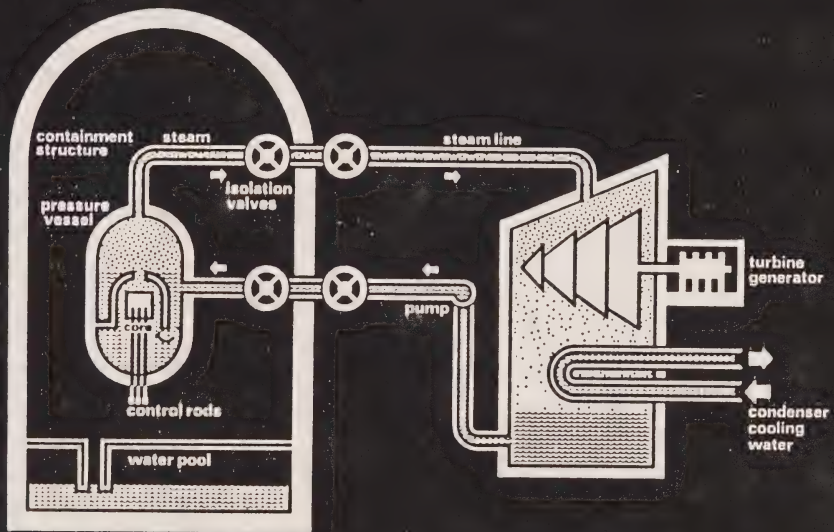
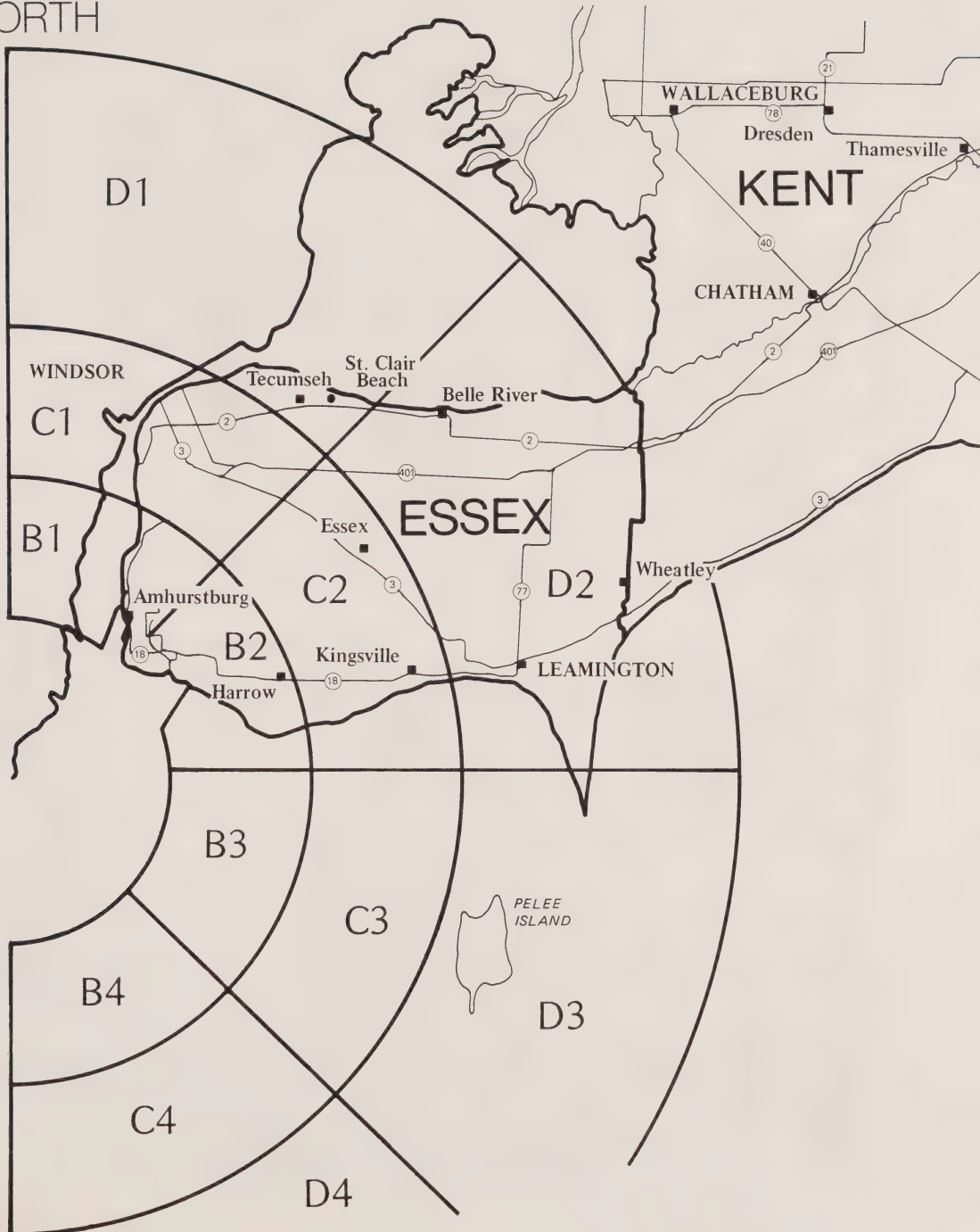


FIG 2 - PRIMARY ZONE AND RESPONSE SECTORS

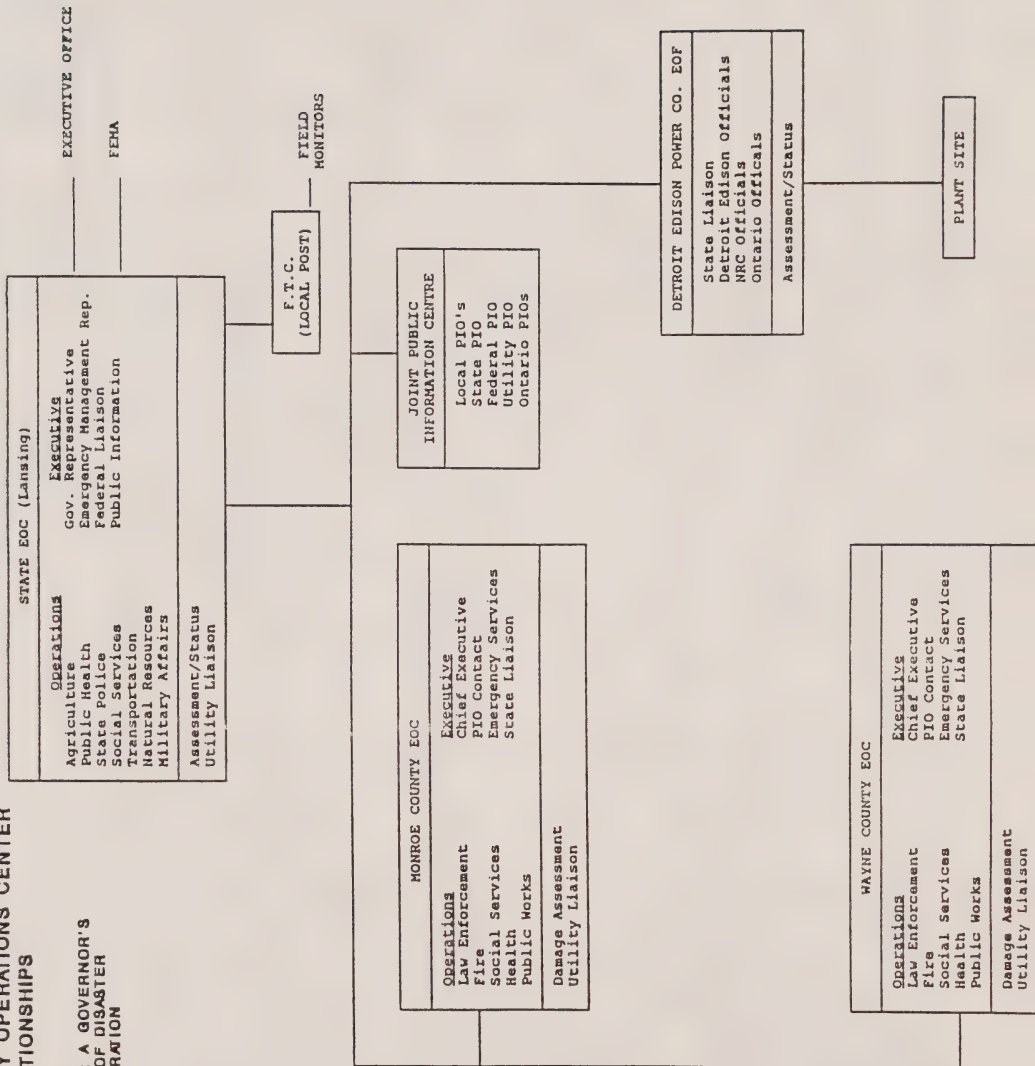


FIG 3 - SECONDARY ZONE AND SUB-SECTORS



# ENRICO FERMI 2 POWER PLANT EMERGENCY OPERATIONS CENTER INTERRELATIONSHIPS

FIGURE 4 - MICHIGAN STATE EMERGENCY ORGANIZATION





## CHAPTER 3

### NOTIFICATION

#### 3.1 General

- 3.1.1 This chapter covers the notification system used in the case of an Enrico Fermi 2 atmospheric emission, by itself or concurrent with a liquid emission. In these cases it is expected that operations would be conducted so that Phase 1 would precede Phase 2.
- 3.1.2 However, in certain cases (namely for a purely liquid emission from Enrico Fermi 2, and for certain other transborder accidents) Phase 1 operations would not be required, and the Provincial Plan will be activated for Phase 2 operations only. The notification system described below would not apply in full in such cases. The differences are dealt with in Chapter 6 below (for a purely liquid emission) and in Part VIII of the Provincial Nuclear Emergency Plan (for transborder emergencies other than one at Enrico Fermi 2).

#### 3.2 Initial Notification

- 3.2.1 The Coordinator, Emergency Planning Ontario, through the pre-designated contact point in the Provincial emergency organization, shall be notified by:
  - (a) The Enrico Fermi 2 plant. Notification to the Provincial contact shall occur within 15 minutes of the initiation of an Unusual Event, Alert, Site Area Emergency or General Emergency notification; and
  - (b) The Department of State Police, Michigan, immediately following receipt of an Alert, Site Area Emergency, or General Emergency declaration from the Enrico Fermi 2 facility.
- 3.2.2 These notifications shall be coupled with whatever essential additional information is available, as well as any recommendations for immediate protective action in Essex County, if required. After the initial notification from Fermi 2 of any or each of the levels, all further communication shall be between the Province and the Michigan State Police only (not the Fermi 2 facility).

3.2.3 The Coordinator, Emergency Planning Ontario (or, where necessary, alternates), shall assign a category to the notification, and decide whether the municipal plan and organization should be activated or placed on standby, based on the classification assigned to the incident by the nuclear facility as prescribed in 3.2.4 below. The standby or activate directive shall be immediately communicated to the municipal contact point. In the case of a Category 1 only the Head, Municipal Control Group shall be kept informed of the situation by the CEPO.

3.2.4 The following categories and actions shall be derived from a notification received from Michigan:

Unusual Event	- Category 1. Monitor situation
Alert	- Category 2. Standby
Site Area Emergency	- Category 2. Activation
General Emergency	- Category 3. Activation

3.2.5 The Provincial and municipal contact points are prescribed in Annex B to Appendix 9 (page 69).

### 3.3 Internal Notification and Activation

#### 3.3.1 Provincial

(a) The Coordinator, Emergency Planning Ontario (or, where necessary, alternates), having decided on the category and appropriate action based upon the notification received from Michigan (paragraph 3.2.4 above) shall initiate the internal fan-out notification, except in the case of a Category 1. The notification message shall include the notification category, with the exception specified in (b) below.

(b) In notifying the municipal contact point, the CEPO (or alternate) shall not include the notification category but shall only direct whether the Municipal Plan shall be activated or placed on standby, (see 1.3.2)

- (c) In case the plans are placed on standby, the Coordinator shall continue to monitor the situation, obtain technical advice and shall activate the plans when considered appropriate, or when a new notification requiring this is received from Michigan.
- (d) The Provincial fan-out notification procedure and lists are contained in Appendix 9 (page 66). They provide for initiation of the Provincial fan-out, and notification of the members of the Ontario Liaison Team, the Provincial Operations Centre and certain external agencies.
- (e) The members of the Phase 2 Advisory Committee shall be notified at an appropriate time towards the end of Phase 1.
- (f) The notification procedure for the members of the Provincial Information Centre and the Local Information Centre shall be prescribed in their operating procedures.
- (g) The notification procedure for the members of the Ingestion Monitoring Organization (IMO) shall be prescribed in the IMO procedures.
- (h) The following ministries and agencies shall issue their own internal notification and activation procedures and lists which should include their appropriate regional and area/district offices (2.5.3 above):
  - Ministry of Agriculture & Food
  - Ministry of Community & Social Services
  - Ministry of Culture and Communications
  - Ministry of the Environment
  - Ministry of Health
  - Ministry of Natural Resources
  - Ministry of Transportation
  - Ontario Provincial Police
- (i) All of the above-mentioned Provincial notification lists shall provide for immediate activation of their respective organizations (less the IMO) upon receipt of a Category 3 notification, or upon activation of the Provincial Nuclear Emergency Plan.

- (j) The notification lists mentioned in (c) through (g) above shall be updated and, if necessary, re-issued every six months, or more often if appropriate.

### 3.3.2 Municipal

- (a) The municipal plan shall prescribe the internal municipal notification and activation procedure. Individual municipalities and municipal organizations shall set up their own internal notification and activation procedures, and include them in their plans. These procedures shall ensure that all elements of the municipal response organization can be expeditiously notified when required.
- (b) When notified of an emergency, the municipal contact point shall convey the message received according to the municipal internal notification procedure.

### 3.3.3 Others

Other organizations which are affected and need to notify their members at the onset of a nuclear emergency shall set up their own internal notification procedures, and shall implement them according to the content of the emergency notification received by them. These procedures shall provide for immediate activation of emergency plans in case of a Category 3 notification, or when the Provincial Nuclear Emergency Plan is activated (Note: This does not apply in the case of a liquid emission nor in the case of an activation of the Provincial Plan for Phase 2 operations only).

## 3.4 External Notification

- 3.4.1 The Federal Government and the Canadian Coast Guard shall be notified as prescribed in Annex E to Appendix 9 (page 72).
- 3.4.2 Certain other agencies/organizations, which need to be notified early, shall be so notified by the following, who shall set up in advance the necessary procedures for doing so:



- (a) Ministry of Agriculture & Food shall notify:  
Ontario Milk Marketing Board  
Health of Animals (Windsor)
- (b) Ministry of Community & Social Services shall notify:  
Red Cross, Ontario Division  
St. John Ambulance, Ontario Council
- (c) Ministry of Culture and Communications shall notify:  
Bell Canada  
CNCP Telecom
- (d) Ministry of Natural Resources shall notify the  
Essex Region Conservation Authority.
- (e) Ministry of Transportation shall notify:  
National Transportation Agency - Emergency Alert  
Air Traffic Control
- (f) The municipal plan shall provide for notification of:  
County of Essex  
City of Windsor  
Boards of Education  
Local utilities (Hydro, Gas, Water)  
Local branches of voluntary organizations  
Essex Terminal Railway  
Boblo Island
- (g) The municipal plan shall provide for early notification of the Designated Media.

### 3.5 Public Notification

- 3.5.1 Notification to the public of the occurrence or imminence of a nuclear emergency (and the need to adopt some protective measure, if necessary) shall be carried out as follows:
  - (a) Alerting of the public in the Primary Zone by means of sound signals, which would cause them to tune to pre-designated radio/TV stations (as instructed in the public education

(b) Broadcast through the Designated Media of an appropriate announcement.

3.5.2 The system to achieve the above public notification shall be prescribed in the Municipal Plan.

3.5.3 Alerting times for sectors are contained in Appendix 3 (page 42). The police forces involved shall ensure that the requisite resources are allocated to meet these target times.

## CHAPTER 4

### OPERATIONS - PHASE 1

#### 4.1 Introduction

##### 4.1.1 Scope

This chapter deals with the emergency response in case of a radioactive emission to the atmosphere, or such an emission combined with a liquid emission. Emergency response in case of a purely liquid emission is dealt with in Chapter 6.

##### 4.1.2 Overview

Operations during Phase 1 are expected to proceed according to the following sequence:

- (a) Notifications (Chapter 3).
- (b) Appropriate response to the notifications, including, where necessary, activation of plans (section 4.2 below).
- (c) The automatic implementation of certain immediate measures, including the dispatch of the Ontario Liaison Team to Michigan (sections 4.3 and 4.6 below, and Table 4.1).
- (d) The Province will assume control of operations as soon as it activates its plan. As soon as possible a Provincial emergency will be declared (sections 4.4 and 4.5 below).
- (e) The Province will assess the need for any protective measures, and will institute those considered necessary (section 4.8 below).
- (f) The Province will carry out an ongoing assessment of the situation and will order appropriate protective and operational measures (sections 4.8 and 4.9 below). As soon as the Ontario Liaison Team is operational, it will take over this function (section 4.7 below).

- (g) At an appropriate time the Province will order the commencement of ingestion monitoring (section 4.12 below).
- (h) When the danger of radiation emissions from the nuclear facility has ended, the Province will rescind, as appropriate, the protective measures imposed, and allow or arrange for the return of evacuees, where safe. A smooth transition will be made from Phase 1 to Phase 2 (section 4.13 below).

#### 4.2 Response to Notification

- 4.2.1 The appropriate response to a notification received from Michigan (in terms of activation of plans or placing them on standby) is prescribed in 3.2.4 above (page 12).
- 4.2.2 The municipal emergency organization shall respond to a notification received from the Province according to the instructions contained therein.

#### 4.3 Immediate Actions

- 4.3.1 Depending on whether plans are being placed on standby or activated, and the notification category, certain immediate actions shall be taken at the Provincial and municipal levels. These are tabulated in Table 4.1 (page 26).
- 4.3.2 The Municipal Plan and the plans of all affected ministries, agencies and other organizations shall provide for these immediate actions to be carried out automatically upon receipt of the relevant notification message.

#### 4.4 Provincial Assumption of Control

- 4.4.1 The Province shall be in control of operations from the moment the Provincial Plan is activated for an Enrico Fermi 2 emergency.
- 4.4.2 Until the Provincial Operations Centre is functional, it shall be the responsibility of the Coordinator, Emergency Planning Ontario, to keep the situation under review and, based on appropriate information and advice, direct the municipal organization to take measures necessary to ensure protection of the public.



- 4.4.3 As soon as the Provincial Operations Centre is functional, it shall assume the exercise of operational control on behalf of the Province. When the Ontario Liaison Team is ready, the Operations Centre shall transfer responsibility for directing protective action to it (see 4.7 below), and shall inform the Municipal Control Group.
- 4.4.4 The Municipal Control Group has the authority to direct the implementation of protective measures ordered by the Province (as per 4.4.2 and 4.4.3 above) in any of the designated municipalities and the Township of Anderdon. It may recommend additional protective measures it deems necessary but shall implement them only after it receives approval from the Province.

#### 4.5 Declaration of a Provincial Emergency

- 4.5.1 The Coordinator, Emergency Planning Ontario, shall arrange for the declaration of a Provincial emergency, as provided for in Appendix 5, Provincial Plan, Part I, as soon as possible after the activation of the Provincial Plan.
- 4.5.2 Normally, the area to be covered by a Provincial declaration for an Enrico Fermi 2 emergency shall be the whole of Essex County.

#### 4.6 Ontario Liaison Team

- 4.6.1 The members of the Ontario Liaison Team (OLT) shall, upon receipt of a Site Area Emergency or a General Emergency notification, proceed by fastest means to Michigan (for travel arrangements, see Appendix 8, page 56).
- 4.6.2 The OLT members shall base themselves, as follows:
  - (a) Head OLT, the Operations Officer and the Technical Officer at the Emergency Operations Facility at Enrico Fermi 2.
  - (b) The two Information Officers at the Joint Public Information Centre (JPIC).

For the Michigan State organization, see Figure 4 (page 10). For the locations of these facilities, see Appendix 6 (page 51).

- 4.6.3 The functions and responsibilities of the Ontario Liaison Team and its members are prescribed in Appendix 8 (page 56).

#### 4.7 OLT Assumption of Direction

- 4.7.1 The Ontario Liaison Team (OLT) shall assume responsibility for directing protective action as soon as the following requirements are met:
- (a) The OLT is established and is in a position to make the necessary assessments.
  - (b) The necessary telecommunication links are functional.
- 4.7.2 Notification of OLT assumption of direction shall be made by the Provincial Operations Centre to the Municipal Control Group, and all others concerned. Thereafter, directives on protective measures shall be issued to the Municipal Control Group by the Head OLT. The MCG should complete any protective measure being implemented at the time of take-over, but no other protective, preparatory or precautionary measure relating to the nuclear emergency shall be undertaken thereafter by the MCG without the direction or concurrence of the Head, Ontario Liaison Team.
- 4.7.3 The Ontario Liaison Team (OLT) shall maintain close contact with the Provincial Operations Centre, as follows:
- (a) The Head OLT shall keep the Executive Director briefed on developments, and shall consult with him on proposed protective action directives.
  - (b) The Technical Officer shall keep the Head, Technical Group, informed; shall pass relevant technical information to the Technical Group; shall obtain the results of field monitoring, and their interpretation of them, from the Technical Group; and shall consult with them, as necessary.
  - (c) The Senior Information Officer shall keep the Director of Information briefed, and shall seek guidance from him/her on Ontario information to be released in Michigan.

4.7.4 The Ontario Liaison Team shall also keep the municipal emergency organization informed, as follows:

- (a) The Operations Officer shall keep the MCG informed of developments, through the Provincial Representative.
- (b) The Information Officer shall keep the Local Information Centre briefed regarding news releases issued by the Joint Public Information Centre.
- (c) The Technical Officer will be available to answer questions from the Technical Briefer at the Local InfoCentre.

#### 4.8 Protective Measures by the Province

##### 4.8.1 Preparatory Measures

The Province (as per 4.4 above) shall consider the desirability of imposing the following preparatory measures in the whole or part of the Primary Zone:

- (a) suspension of work
- (b) closing of beaches and recreation areas
- (c) distribution of KI pills
- (d) stage 2 traffic control

and shall impose those considered appropriate in the whole, or a part, of the Primary Zone.

The Province shall also consider the desirability of imposing, as a precaution, any of the protective measures listed in Table 4.2 (page 29) especially entry control. An assessment shall also be made of the need to extend any of the ingestion control measures to areas beyond the Primary Zones.

In case of a serious accident, and particularly in the event of a Category 3 notification, an early precautionary evacuation of Boblo Island (Sector 8) should be considered.

If it is certain that no radiation risk would be incurred by drivers, the Province shall direct the Ministry of Agriculture & Food to arrange for the clearance of all dairy farms' milk storages in the Primary Zone.

#### 4.8.2 Protective Measures

Based on a continuous assessment of future projections of how the situation may develop (Chapter 6, Provincial Plan, Part I, refers), the Provincial Operations Centre or, upon assuming control, the Ontario Liaison Team shall decide on and order appropriate protective measures (Table 4.2, page 29) during the course of Phase 1. These measures shall be implemented by the municipality and other appropriate agencies.

Measures affecting lake sectors shall be communicated to the Canadian Coast Guard and No.1 District OPP for implementation.

#### 4.9 Evacuations

- 4.9.1 Evacuations, if considered necessary, shall be carried out by Response Sector, according to the outline evacuation plan given in Appendix 4 (page 43).
- 4.9.2 It is expected that most residents will be able to evacuate under their own arrangements. Vehicles shall be provided, under municipal arrangements, to move those evacuees who are unable to furnish their own transportation.
- 4.9.3 Ambulances and special vehicles shall be made available, under Windsor Central Ambulance Communication Centre and municipal arrangements, to those residents requiring special transportation.
- 4.9.4 The municipal plan shall include the arrangements by which residents may obtain such alternate means of transportation.
- 4.9.5 The smooth and expeditious movement of evacuee traffic shall be the responsibility of the traffic control organization set up under the municipal traffic control plan.
- 4.9.6 Medical support to any evacuation shall be provided by the local ambulance services and hospitals under the operational co-ordination of the Windsor Central Ambulance Communications Centre.



- 4.9.7 Arrangements for the reception and care of evacuees shall be prescribed in the municipal plan, which should include letters of agreement with executed host municipalities.

- 4.9.8 Boblo Island

The evacuation of this island presents special problems since most of the holiday-makers visiting it arrive by boat from the U.S.A. The arrangements for evacuating the island are given in Appendix 5 (page 46).

#### 4.10 Forward Provincial Operations Centre

- 4.10.1 In case of a major accident involving large-scale evacuations, a Forward Provincial Operations Centre may be set up in Essex County. The decision to do so will be made by the Executive Authority. For the composition of this Centre, see paragraph 2.5.3 (page 4). For its location, see Appendix 6 (page 51).
- 4.10.2 This Forward OpsCentre shall coordinate the provision of Provincial support and assistance to the municipal response organization. If considered appropriate, the Executive Authority may direct the OpsCentre to take over control of operations in the affected area.

#### 4.11 Plume Monitoring

- 4.11.1 If considered necessary, the Head OLT shall arrange for one or more Radiological Emergency Teams (RETs) from Fermi 2 to proceed to Essex County and carry out field monitoring in the Primary Zone.
- 4.11.2 When RETs are to be dispatched, the Head OLT shall inform the Provincial Operations Centre, which shall in turn inform the appropriate Canadian Customs and Immigration authorities. The entry of the RETs into Canada would be covered under the Goods for Emergency Use Remission Order (see Annex C to Appendix 10, page 77, for the Order and the procedure for its implementation).
- 4.11.3 Results of the monitoring will be communicated by the RETs to Fermi 2, where they will be made available to the Ontario Liaison Team.

- 4.11.4 If the plan has been activated, the survey section of the IMO shall, upon arrival at the forward rendezvous (4.12.1 below), commence field monitoring according to a pre-arranged plan, or as directed by the Technical Group of the Provincial Operations Centre (through the Ingestion Monitoring Control Group).
- 4.11.5 The results of the field monitoring shall be communicated by the Field HQ of the IMO to the Ingestion Monitoring Control Group at the Provincial Operations Centre, which shall convey them to the Technical Group for evaluation and transmission to the Technical Officer of the Ontario Liaison Team.

#### 4.12 Ingestion Control Monitoring

- 4.12.1 The field elements of the Ingestion Monitoring Organization (IMO) shall, immediately upon a standby notification or upon activation of the Provincial Plan, move to their forward rendezvous in Essex County (Appendix 6, page 51).
- 4.12.2 In the case of activation of the Provincial Plan, the IMO survey section shall commence Phase 1 field monitoring (4.11.4 above) upon arrival at this rendezvous.
- 4.12.3 When the situation is considered to have stabilized, the Executive Director, Provincial Operations Centre, shall direct the Ingestion Monitoring Control Group to commence field monitoring for Ingestion Control purposes.

#### 4.13 Transition to Phase 2

The Executive Director, Provincial Operations Centre, shall carry out the relevant provisions of Chapter 6, Provincial Plan, Part I, at the appropriate stage. This will result in the rescinding of the protective measures ordered, including the return of most, if not all, evacuees. The Phase 2 Advisory Committee shall be convened.

#### 4.14 Emergency Worker Safety

- 4.14.1 At the commencement of an emergency, the Response Sectors in the Primary Zone shall all be assumed to carry a safety status of GREEN (Provincial Plan, Part I, Chapter 6, refers).

- 4.14.2 If, prior to OLT assumption of direction, the Coordinator, Emergency Planning Ontario, upon the advice of the Head, Technical Group, considers it appropriate, he may change the above sector safety status, and so inform the Municipal Control Group, and other affected organizations.
- 4.14.3 When the Ontario Liaison Team (OLT) assumes operational direction, it shall, as early as is feasible, assign a safety status to each Response Sector and inform the Provincial OpsCentre and the Municipal Control Group, who shall further disseminate the information to all concerned. These allocations shall be periodically updated.
- 4.14.4 Emergency workers entering sectors assigned a safety status other than GREEN shall first report to an Exposure Control Centre, and shall observe the precautionary measures prescribed by the Centre and in the Provincial Plan, Part I, Appendix 4.

TABLE 4.1 - IMMEDIATE ACTIONS IN RESPONSE TO NOTIFICATION

<u>Notification Category &amp; Action</u>	<u>Provincial</u>	<u>Immediate Actions</u>	<u>Municipal</u>
Category 1	CEPO shall monitor the situation and keep the Head MCG apprised.		No action required unless notification category is upgraded and further instructions given by Province.
Category 2 Standby			
	(1) CEPO shall initiate notifications placing Provincial and municipal organizations on standby.	(1)	Municipal contact point shall initiate notification placing municipal organization on standby.
	(2) The Ontario Liaison Team (OLT) shall make all necessary arrangements to proceed to Michigan as soon as required.	(2)	Municipal OpsCentre shall be set up (but not staffed).
	(3) Provincial OpsCentre shall be set up (but not staffed).	(3)	Local InfoCentre shall be set up (but not staffed).
	(4) Provincial InfoCentre shall be set up (but not staffed).	(4)	ECDUs shall be set up and staff placed on standby.
	(5) Operations rooms for Ministry Emergency Action Groups shall be set up (but not staffed).	(5)	#1 and #2 Reception/Evacuee Centres shall be set up and staff placed on standby.
	(6) IMO Field HQ and OH survey sections shall proceed to their forward rendezvous.		
	(7) Provincial Representative on Municipal Control Group shall proceed to Essex County.		
	(8) Staff from Ontario Hydro for Local InfoCentre and ECDUs shall proceed to Essex County.		
	(9) Ontario Hydro shall complete arrangements to move stocks of KI pills to Essex County.		

**TABLE 4.1 - IMMEDIATE ACTIONS IN RESPONSE TO NOTIFICATION (cont'd)**

<u>Notification Category &amp; Action</u>	<u>Immediate Actions</u>	
	<u>Provincial</u>	<u>Municipal</u>
Category 2 Activation	(1) CEPO shall initiate notification activating Provincial and municipal plans.	(1) Municipal contact point shall initiate notification activating municipal plan.
	(2) OLT shall proceed to Michigan.	(2) Municipal OpsCentre and Local InfoCentre shall be set up and staffed.
	(3) Provincial OpsCentre shall be set up and staffed.	
	(4) Provincial InfoCentre shall be set up and staffed.	(3) A municipal emergency shall be declared in the designated municipalities.
	(5) A Provincial Emergency shall be declared (see 4.2).	(4) Notification of the public shall be carried out (3.5 above).
	(6) Ministry Emergency Action Groups shall assemble.	(5) Exposure Control/Decontamination Units (ECDUs) shall be set up (if not already done) and staffed.
	(7) IMO field elements shall proceed to forward rendezvous in Essex County (see Appendix 6, page 51), if not already done, and shall commence Phase 1 field monitoring. Sampling teams shall join the IMO Field HQ.	(6) Emergency organizations of appropriate municipal and county departments shall be activated.
	(8) Ontario Hydro staff for Local InfoCentre and ECDUs shall proceed to Essex County, if not already moved, and take up their duties.	(7) Reception/Evacuee Centres #1 & #2 shall be set up and staffed. (8) Traffic Control Plan shall be activated.



TABLE 4.1 - IMMEDIATE ACTIONS IN RESPONSE TO NOTIFICATION (cont'd)

<u>Notification Category &amp; Action (cont'd)</u>	<u>Immediate Actions</u>		<u>Municipal</u>
	<u>Provincial</u>		
<u>Category 2 Activation (cont'd)</u>	(9) Ontario Hydro shall move stocks of KI pills to designated locations in Essex County and hand over to municipal officials as pre-arranged.		
		Items (1) to (9) above.	Items (1) to (8) above.
<u>Category 3 Activation</u>	(10) Canadian Coast Guard shall broadcast a warning for marine craft to remain clear of sectors 10 and 11 and shall assist OPP in preventing entry into the area.		(9) Implement Stage 2 of Traffic Control Plan.
	(11) MTO shall notify Air Traffic Control to direct any aircraft to avoid flying over Primary Zone.		(10) Implement protective measures, if any, as directed by Province.
	(12) CEPO shall, in consultation with the Head, Technical Group and Michigan State officials, consider the advisability of imposing any protective measures (see Table 2, page 29) in the Primary Zone (or parts thereof) and shall direct the Head, Municipal Control Group as appropriate.		

TABLE 4.2 - PROTECTIVE MEASURES

EXPOSURE CONTROL MEASURES

1. Entry Control<sup>1</sup>
2. Sheltering
3. Evacuation
4. Ingestion of Potassium Iodide (KI)

INGESTION CONTROL MEASURES

1. Milk Control
2. Water Control<sup>2</sup>
3. Pasture Control
4. Produce and Crop Control
5. Livestock Control
6. Food Control
7. Land Control\*
8. Decontamination\*

\* Only applicable to long term restoration.

NOTES

1. Entry Control: The specific measures are indicated in Table 4.1, Provincial items (10) and (11), Category 3 notification.
2. Water Control: The Amherstburg water supply plant may need early attention.



## CHAPTER 5

### OPERATIONS - PHASE 2

#### 5.1 General

- 5.1.1 Phase 2 operations will normally follow Phase 1 operations. However, in certain cases the Provincial Plan may be activated only for Phase 2 operations (namely, in the case of a purely liquid emission and for a transborder accident other than an Enrico Fermi 2 accident). The general conduct of Phase 2 operations will be the same in all circumstances, although details will vary depending on whether Phase 2 operations follow Phase 1, or whether the problem is a liquid emission, or a transborder accident as qualified above.
- 5.1.2 This chapter covers Phase 2 operations following Phase 1. Phase 2 operations in the case of a liquid emission are covered in Chapter 6 below. Phase 2 operations for transborder emergencies, other than a Fermi 2 emergency, are dealt with in the Provincial Plan, Part VIII.

#### 5.2 Overview

- 5.2.1 During Phase 2 the main activity will be:
  - (a) Ingestion Control operations (monitoring of the food chain and water supplies for possible radioactive contamination, and taking appropriate measures if any is found. These Ingestion Control measures are listed in Table 4.2, page 29).
  - (b) Restoration operations (measures to restore conditions to normal, including assessment and payment of compensation for losses, if any).
- 5.2.2. The Provincial organization for Phase 2 operations is shown in Figure 8 of the Provincial Plan, Part I. Depending on the situation, the Ontario Liaison Team may be scaled down, or withdrawn entirely from Michigan.
- 5.2.3 The normal municipal organization should be able to handle Phase 2 operations within each municipality. If considered desirable, the Municipal Control Group may continue into Phase 2.

### 5.3 Area of Operations

Phase 2 operations may extend to the outer limits of the Secondary Zone, but are likely to be confined only to those areas of the zone subjected to the plume during Phase 1. The Secondary Zone includes the whole of Essex County, Pelee Island, and portions of Lake Erie (see Figure 3, page 9).

### 5.4 Field Monitoring

During Phase 2, field monitoring shall be carried out as follows:

- (a) The field elements of the Ingestion Monitoring Organization shall carry out Ingestion Control and Restoration monitoring in the Secondary Zone.
- (b) Ingestion monitoring throughout the Province shall be carried out by implementation of the plan for General Province-wide Monitoring (see Provincial Plan, Part I, Chapter 5)

These monitoring operations may be supplemented by the use of other monitoring resources that may become available.

### 5.5 Ingestion Control Operations

Based upon the results of field monitoring, the Phase 2 Advisory Committee (Provincial Plan, Part I, Chapter 4) shall advise the Executive Authority on the Ingestion Control measures (Table 4.2, page 29) that may be necessary. Appropriate instructions shall be issued by the Provincial Operations Centre to ministries, municipalities and other organizations, who shall implement them.

### 5.6 Restoration Operations

Under direction of the Executive Authority, advised by the Phase 2 Advisory Committee, an overall restoration plan shall be developed and communicated to all concerned. This will include, among other things, the return of evacuees not permitted to go back to their homes before the end of Phase 1, the housing of those evacuees who cannot be allowed back for some time, assessment and compensation arrangements, etc.



## 5.7 Municipal Restoration Operations

Under the overall plan developed by the Province, each municipality affected by the emergency shall formulate a restoration plan, and take all necessary measures to restore conditions to normal within its area.

## 5.8 Emergency Worker Safety

- 5.8.1 Based upon the results of field monitoring and dose projections, the Head, Technical Group shall periodically allocate safety status to sub-sectors or areas of the Secondary Zone, according to the guidelines prescribed in the Provincial Plan, Part I, Appendix 4. These will be communicated by the Provincial Operations Centre to all organizations involved in Phase 2 operations.
- 5.8.2 Emergency workers shall observe the precautions prescribed in the Provincial Plan, Part I, Appendix 4 according to the safety status assigned. If necessary, Exposure Control Centres already established shall continue to function into Phase 2, and new ones may be set up to cover other areas.

## 5.9 Termination of Emergency

- 5.9.1 When the Phase 2 Advisory Committee has completed its tasks, it will be disbanded by the Executive Authority.
- 5.9.2 When considered appropriate, the Provincial emergency will be terminated.



## CHAPTER 6

### OPERATIONS - LIQUID EMISSION

#### 6.1 General

In case of a purely liquid emission (i.e., a release of radioactive liquid from Enrico Fermi 2 into Lake Erie), the general response would be in the form of Phase 2 operations, as described in Chapter 5. The initial response to such an emergency would differ from that detailed in Chapter 4, and is dealt with below.

#### 6.2 Notification and Response

##### 6.2.1 Initial Notification

The initial notification from Enrico Fermi 2 shall be made under the same criteria and in the same manner as for an airborne emission (section 3.2 above), except that the keyword "WATERBORNE" will be included in the notification message.

##### 6.2.2 Category 1 and 2 Assessment - Response

If the Coordinator, Emergency Planning Ontario, attaches a Category 1 or 2 to the notification of a liquid emission (as per 3.2.4 above), the situation will be monitored, and, if and when appropriate, the CEPO, shall place the Phase 2 organization on standby or activate the Provincial Nuclear Emergency Plan for Phase 2 operations (section 6.3 below). A Category 3 situation cannot arise.

6.2.3 The Coordinator, Emergency Planning Ontario shall **not** convey any category assessments to the municipal contact point, but shall give clear direction as to whether the municipal plan is to be activated or not, and what measures, if any, are to be immediately taken.

#### 6.3 Activation for Phase 2 Operations

When the Provincial Nuclear Emergency Plan is to be activated for Phase 2 operations only, notification to this effect shall be made to all concerned, including the following:

- (a) The Provincial Phase 2 organization (refer to 5.2.2 above).

- (b) The Ontario Liaison Team, if it is to be despatched to Michigan.
- (c) Ministry of the Environment.
- (d) Municipalities likely to be affected.
- (e) The Federal Government.
- (f) Canadian Coast Guard.

#### 6.4 Response - Provincial: Phase 2

The notification message to the different elements of this organization shall specify whether they are to remain on standby or be activated. In the latter case, the following actions shall be taken:

- (a) The Ingestion Monitoring Control Group (IMCG) and the Technical Group shall assemble at the Provincial Operations Centre, and commence planning for ingestion monitoring. They shall receive direction from the Coordinator, Emergency Planning Ontario, and technical guidance from the Head, Technical Group.
- (b) The Ingestion Monitoring Organization field elements shall assemble at their assigned rendezvous, and commence monitoring as and when directed by the IMCG.
- (c) The Phase 2 Advisory Committee shall meet at the Provincial Operations Centre at a time to be designated by the Coordinator, Emergency Planning Ontario.
- (d) An Operations Group component (consisting of the Head/Deputy Head, the two Operations Staff Officers and the Administrative Officer) shall assume responsibility for running the Operations Centre, including its telecommunications. Additional support staff shall be called in, as required. The Operations Group may be activated later (6.6.4 below).
- (e) If notified, the Information Group shall report to the Provincial Operations Centre, and the Provincial Information Centre staff shall set up that centre (section 6.7 below).

- (f) The Solicitor General of Ontario shall assume the functions of the Executive Authority.

#### 6.5 Response - Municipal

- 6.5.1 In the case of a liquid emission notification, the municipal plan shall not be activated unless specifically so ordered by the Coordinator, Emergency Planning Ontario. This applies even in the case of the activation of the Provincial Plan for Phase 2 operations.
- 6.5.2 The municipalities may be directed by the Province to convene the Municipal Control Group, if that is considered appropriate.
- 6.5.3 The municipalities shall implement any measures ordered by the Province to deal with the situation.

#### 6.6 Operations

##### 6.6.1 Immediate Actions

Immediately after the activation of the Provincial Plan, the Coordinator, Emergency Planning Ontario, shall consider the following measures and, taking into account technical advice, implement those considered appropriate:

- (a) Entry control into lake sectors (see paragraph 4.8.2, page 22).
- (b) Closing beaches in the affected area.
- (c) Banning swimming, fishing, and the consumption of fish caught in Sectors 10 and 11.
- (d) Closing the water intakes at Amherstburg and commencing testing for radioactivity under arrangements of the Ministry of the Environment.

##### 6.6.2 Liaison

If considered necessary, the Ontario Liaison Team shall be despatched to Michigan.



6.6.3 Provincial Emergency

The Coordinator, Emergency Planning Ontario, shall examine the need for declaration of a Provincial emergency, and shall arrange for such a declaration if considered appropriate.

6.6.4 Phase 2 Operations

These shall be carried out as outlined in Chapter 5 above.

6.6.5 Implementation

The Operations Group of the Provincial Operations Centre, or part of it, may be activated, if required, to plan, organize and ensure implementation of the measures to be imposed.

6.7 Emergency Information

When activating the Provincial Plan, the Coordinator, Emergency Planning Ontario, shall consult with the Director of Emergency Information and decide upon the most appropriate organizational structure to handle the emergency information operation. If considered desirable, the Information Group of the Provincial Operations Centre and the Provincial Information Centre may be activated.

## CHAPTER 7

### EMERGENCY INFORMATION & PUBLIC DIRECTION

#### 7.1 General

The emergency information arrangements for a Fermi 2 emergency will differ somewhat from the standard pattern. These differences are clarified below.

#### 7.2 Designated Media

Prior arrangements shall be made by the designated municipalities with the media organizations which are to be used for communicating directions and information to the Primary Zone population (the Designated Media).

#### 7.3 Roles and Responsibilities

##### 7.3.1 Ontario Liaison Team (for details see Appendix 8, page 56)

- (a) Obtain and pass information on U.S. developments to the Provincial Operations Centre and the Local Information Centre.
- (b) Obtain and provide information on Ontario developments to the Joint Public Information Centre (Michigan).

##### 7.3.2 Provincial Operations Centre (Information Group)

- (a) Provide policy direction for and monitor the emergency information operation, and ensure that it is proceeding smoothly.
- (b) Obtain information on U.S. developments from the OLT, and local developments from the Local Information Centre.
- (c) Through the Provincial Information Centre, provide information on the emergency, and measures being taken to deal with it, to the media and the public.
- (d) Provide information on Ontario developments to the OLT.

### 7.3.3 Provincial Information Centre

Under the policy direction of the Information Group at the Provincial Operations Centre, provide information to the media and the public. Carry out its other functions, as assigned in the Provincial Plan, Part I (chapter 4).

### 7.3.4 Local Information Centre

- (a) As instructed by the Municipal Control Group (MCG), issue public action directives to the Designated Media for broadcast to the affected public, (see 7.4 below).
- (b) Provide information to the media, the Provincial Information Centre, and the Ontario Liaison Team on local developments and measures.
- (c) Keep the MCG and the Provincial Operations Centre informed on media and public perceptions and reactions, and recommend any remedial action necessary.
- (d) Assist the media operating in the local area.

## 7.4 Public Action Directives (PADs)

- 7.4.1 These directives are instructions to the public to take some appropriate preparatory or protective measure. They are broadcast by the Designated Media when required under a pre-arranged system. Wherever possible, such prior arrangements should include pre-scripted or pre-recorded messages for each possible measure. In the latter case, the appropriate tape could be played preceded by an announcement of the area to which the measure applied.
- 7.4.2 If any measure is to be implemented at the commencement of an emergency, the Province may broadcast the appropriate PADs through the Canadian Broadcasting Corporation, CBL in Toronto. The need for this shall be assessed by the Coordinator, Emergency Planning Ontario.
- 7.4.3 If any measure is to be implemented before the Local Information Centre is functioning, the Head,

Municipal Control Group (MCG) shall issue the necessary instructions direct to the Designated Media to broadcast the appropriate PAD.

- 7.4.4 Once the Local Information Centre is operational, the Head MCG shall direct it to have the appropriate PADs broadcast by the Designated Media.
- 7.4.5 In the case of any announcement or directive not pre-scripted or pre-recorded, it shall be drafted by the Local Information Centre and transmitted, preferably as hard copy, to the Designated Media.
- 7.4.6 The Local Information Centre shall monitor the PADs as broadcast by the Designated Media, and shall ensure that they are being correctly transmitted to the public. It shall then confirm this fact to the Head MCG.





RESPONSE SECTOR BOUNDARIES

(also see Figure 2, page 6)

SECTOR	MUNICIPALITY	SECTOR BOUNDARY (north; east; south; west)
1	Malden Township	Highway 18; west bank of Big Creek; shoreline of Lake Erie.
2	Malden Township	Alma Street; Creek Road; Highway 18; shoreline of Lake Erie.
3	Malden Township	Highway 18; east bank of Big Creek; west boundary of Holiday Beach Park; shoreline of Lake Erie; west bank of Big Creek.
4	Malden Township	Highway 18 including Malden Centre; County Road 50; east bank of Big Creek.
5	Malden Township	Middle Sideroad; 5th Concession; Highway 18; Creek Road.
6	Town of Amherstburg	Richmond Street; Meloche Road; Lowes Sideroad; east bank of Detroit River.
7	Town of Amherstburg	Michigan Central Railway excluding Chemical Waste Plant; eastern limit of Amherstburg and Meloche Road; Alma Street and Richmond Street; east bank of Detroit River.
8	Malden Township	Boblo Island.
9	Malden Township	Holiday Beach Park.
10	Lake Erie	Detroit River south of Boblo Island; Essex County shoreline; a line drawn at 230° from Bailey Beach to the international boundary; the international boundary.
11	Lake Erie	South boundary of sector 10; Essex County shoreline; a line drawn at 215° from the east end of sector 9 to the international boundary; the international boundary.

APPENDIX 2  
(Ref: Section 2.4)

PLANNING DATA

Sector	Population <sup>1</sup>	Day Care and Nursery Schools <sup>3</sup>	Public and Separate Schools <sup>3</sup>	Senior Citizen and Nursing Homes <sup>3</sup>
1	1414			
2	396			
3	20			
4	179		2 (551)	
5	106			
6	5991	3 (106)	1 (305)	3 (196)
7	4831		4 (2413)	1 (159)
8	see note 2.			
9	2877 <sup>4</sup>			
Total Malden	4992		2	
Total Amherstburg	10822	3	5	4
Total Primary Zone	15814	3	7	4

- Notes:
1. The above population figures are based on 1987 municipal estimates. Amherstburg sectors (6 & 7) include a workforce population and sectors 1 & 9 include a summer resident population.
  2. Sector 8 encompasses Boblo Island. Data is contained in Appendix 5 (page 46).
  3. This indicates the number of institutions in the sector and, in brackets, the enrolled number of students/residents plus the number of staff.
  4. Holiday Beach receives a maximum of 2500 visitors per day during the summer months.

ALERTING AND LEAD TIMES

SECTOR	ALERTING TIME <sup>1</sup>		LEAD TIMES <sup>2</sup>			
			Sheltering <sup>3</sup>		Evacuation	
					Normal Conditions <sup>4</sup>	Reduced Visibility <sup>5</sup>
	hrs.	min.	hrs.	min.	hrs.	min.
1	0	15	1	15	2	10
2	1	15	2	15	2	00
3	1	00	2	00	1	40
4	0	30	1	30	1	40
5	0	30	1	30	1	50
6	0	15	1	15	3	30
7	0	15	1	15	3	50
8	---		---		---	
9	1	45	2	45	2	20

NOTES

- Alerting times are target figures. Municipal plans should be designed to achieve these, or better, under most conditions.
- Lead times represent the total time required to complete protective actions.
- The sheltering lead time = alerting time + 1 hour (time required to make and transmit decision)
- The evacuation lead time under normal conditions = basic evacuation time (from Appendix 4) + 1 hour (decision time)
- Evacuation lead times in conditions of reduced visibility = Reduced Visibility time (from Appendix 4) + 1 hour.
- Evacuation lead times are rounded off to the nearest ten minutes.

EVACUATION - OUTLINE PLAN AND TIMES

SECTOR	TRANSPORTATION	MAIN EVACUATION ROUTE	RECEPTION CENTRE	EVACUATION TIMES <sup>1</sup>		
				NORMAL CONDITIONS <sup>2</sup>	REDUCED VISIBILITY <sup>3</sup>	
	Cars	Buses*		Hrs. Min.	Hrs. Min.	
1 Malden Twp	593		Harrow District High School	1 10	1 20	
2 Malden Twp	167		Harrow District High School	1 00	1 10	
3 Malden Twp	10		Harrow District High School	0 40	0 50	
4 Malden Twp	75		Harrow District High School	0 40	0 50	
5 Malden Twp	45		Harrow District High School	0 50	0 50	
6 Amherstburg	3453	5(11)	Sandwich Secondary School	2 30	3 30	
7 Amherstburg	2461	4(61)	Sandwich Secondary School	2 50	4 00	

\* Buses indicated by ( ) represent buses that will evacuate students from school. These buses will not be transporting students at night. The other buses represent the number of people requiring bus transport from the sectors.

EVACUATION - OUTLINE PLAN AND TIMES

SECTOR	TRANSPORTATION	MAIN EVACUATION ROUTE	RECEPTION CENTRE	EVACUATION TIMES			
				NORMAL CONDITIONS		REDUCED VISIBILITY	
	Cars	Buses*		Hrs.	Min.	Hrs.	Min.
8 Boblo Island		See Appendix 5		Normal Evacuation <sup>4</sup>	8	00	
				Rapid Evacuation <sup>4</sup>	5	00	
9 Malden Twp	965		Harrow District High School	1	20	1	40
		Highway 18 (east)					
GROUPS OF SECTORS							
1, 3, 4, 5, 9	1749			2	00	2	50
1, 2, 3, 4, 5	755			1	30	2	10
1, 2, 5, 6, 7	6584	9 (72)		4	10	5	50

\* Buses indicated by ( ) represent buses that will evacuate students from school. These buses will not be transporting students at night. The other buses represent the number of people requiring bus transport from the sectors.



NOTES

1. Evacuation times represent the period from the time the evacuation order is given by the Municipal Control Group to the time the last vehicle clears the Primary Zone boundary and includes a preparation time of 30 minutes.
2. Evacuation times are estimated under normal conditions and under conditions of reduced visibility. Normal conditions assume:
  - (i) fair weather
  - (ii) a fully mobilized emergency organization
  - (iii) no traffic obstruction
3. Reduced visibility assumes an additional 50% time factor added to the time it takes for the last vehicle to clear the sector under normal conditions to allow for adverse weather conditions such as heavy rain, snow, fog etc.
4. Boblo Island
  - Normal Evacuation - Evacuees from the island will be returned to their place of embarkation.
  - Rapid Evacuation - Evacuees from Amherstburg will be returned there.
    - All other evacuees shall be taken to Wyandotte irrespective of their point of embarkation. However, the last load on each boat may be taken to Detroit if more appropriate.
5. Evacuation times are rounded off to the nearest ten minutes.

APPENDIX 5  
(Ref: Section 4.9)

BOBLO ISLAND

ANNEX A - EVACUATION OF BOBLO ISLAND

ANNEX B - PLANNING DATA

ANNEX A  
to APPENDIX 5  
(Ref: Section 4.10)

### EVACUATION OF BOBLO ISLAND

#### 1.0 Boblo Island

- 1.1 Boblo Island Amusement Park (Response Sector 8) operates from the first weekend in May until the last weekend in September. May and September operation is weekend only. Seven days a week operation begins Victoria Day and ends Labour Day. The average number of persons per day is 7,000; however, attendance may reach peaks of up to 16,000 persons per day.
- 1.2 Access to the island is by boat only, from Amherstburg in Canada, and from Gibraltar and Detroit in the U.S. Special charters are sometimes picked up from Wyandotte.
- 1.3 Basic planning data provided by the American Automobile Association (AAA), which runs the park, is given in Annex B (page 49).

#### 2.0 Notification

- 2.1 The Coordinator, Emergency Planning Ontario (CEPO) shall notify the municipal contact point of an emergency at Enrico Fermi 2 (Section 3.2, page 11). If considered appropriate, the CEPO may couple the notification with a directive to evacuate Boblo Island. The CEPO shall also notify Michigan State of such an evacuation order. In case a rapid evacuation is necessary, the CEPO shall specify this in the order (see 3.0 below).
- 2.2 If an evacuation order is received, the municipal contact point shall first notify the Boblo Island General Manager and subsequently shall notify the MCG of the action required to be taken.
- 2.3 If, during the course of the emergency, the Province decides to order the evacuation of Boblo Island, the Municipal Control Group shall convey this directive to the General Manager, Boblo Island, and the Province shall inform Michigan State. The MCG shall also immediately inform the Traffic Control Centre, since some evacuees will be moving out through Amherstburg.

### 3.0 Evacuation Procedure

3.1 The evacuation of Boblo Island shall be planned so that it can be carried out in one of two ways, depending on the prevailing circumstances:

- (a) As a normal evacuation, when sufficient time is available (see 3.2 below). This is expected to be the most likely method.
- (b) As a rapid evacuation, when the situation requires clearing of the island in the shortest possible time (see 3.3 below). This method of evacuation would be the exception.

#### 3.2 Normal Evacuation Procedure

Evacuees from the island will be returned to their place of embarkation as expeditiously as possible.

#### 3.3 Rapid Evacuation Procedure

Persons on the island shall be evacuated as follows:

- (a) Those who came to the island from Amherstburg will be returned to Amherstburg.
- (b) All other persons shall be taken to Wyandotte, irrespective of their points of embarkation. The last load on each boat may be taken to Detroit, if more appropriate.

### 4.0 Evacuation Planning

The AAA shall be responsible for developing an evacuation plan for Boblo Island to cover the two possible procedures outlined in 3.0 above. It shall also be responsible for informing in advance the State of Michigan, the Province of Ontario, and local municipal authorities of the necessary assistance these jurisdictions will be required to provide in order to implement the evacuation plan.

ANNEX B  
to APPENDIX 5

PLANNING DATA - BOBLO ISLAND

1.0 Attendance and Employee Data

Average number of persons per day: 7,000

Peak weekend of summer: number of persons per day: 16,000

80% of attendance from Detroit

Peak times daily: 3:00 pm to 4:30 pm

Peak number of employees: 1,000

Months of operation - first week May through last week in September; May and September operation is weekend only.

2.0 Transportation

2.1 Boats

Normal Dock # of Boats Capacity/Boat One-Way Travel Time

Gibraltar	2	300	40 min.
	1	65	
	1	585	

Amherstburg	2	275	10 min.
-------------	---	-----	---------

Amherstburg (back-up)	1	245	10 min.
--------------------------	---	-----	---------

Wyandotte	2	2500	45 min.
-----------	---	------	---------

Detroit (uses Wyandotte boats)			90 min.
-----------------------------------	--	--	---------

2.2 Boat Usage

- a) Boats normally in continual transit to/from island except June when they leave dock and stay at the island.
- b) Boats travel at 12 miles per hour = river speed limit. Can travel faster (Columbia can get up to 16 miles per hour).



- c) Boats may travel at 10% above capacity.
- d) Radio system to boats.
- e) Evening cruise use of boats: weekdays: 8:30 p.m.;  
weekends: 11:30 p.m. (7 days per week).

### 2.3 Contact Persons

- a) Jerry Finnegan  
Boblo Island Park Director  
519-736-5442/43                      519-736-5560
- b) David S. Brown  
General Manager, Detroit  
313-843-8800                      313-477-4261

APPENDIX 6  
(Ref. Section 2.8)

EMERGENCY FACILITIES - LOCATIONS

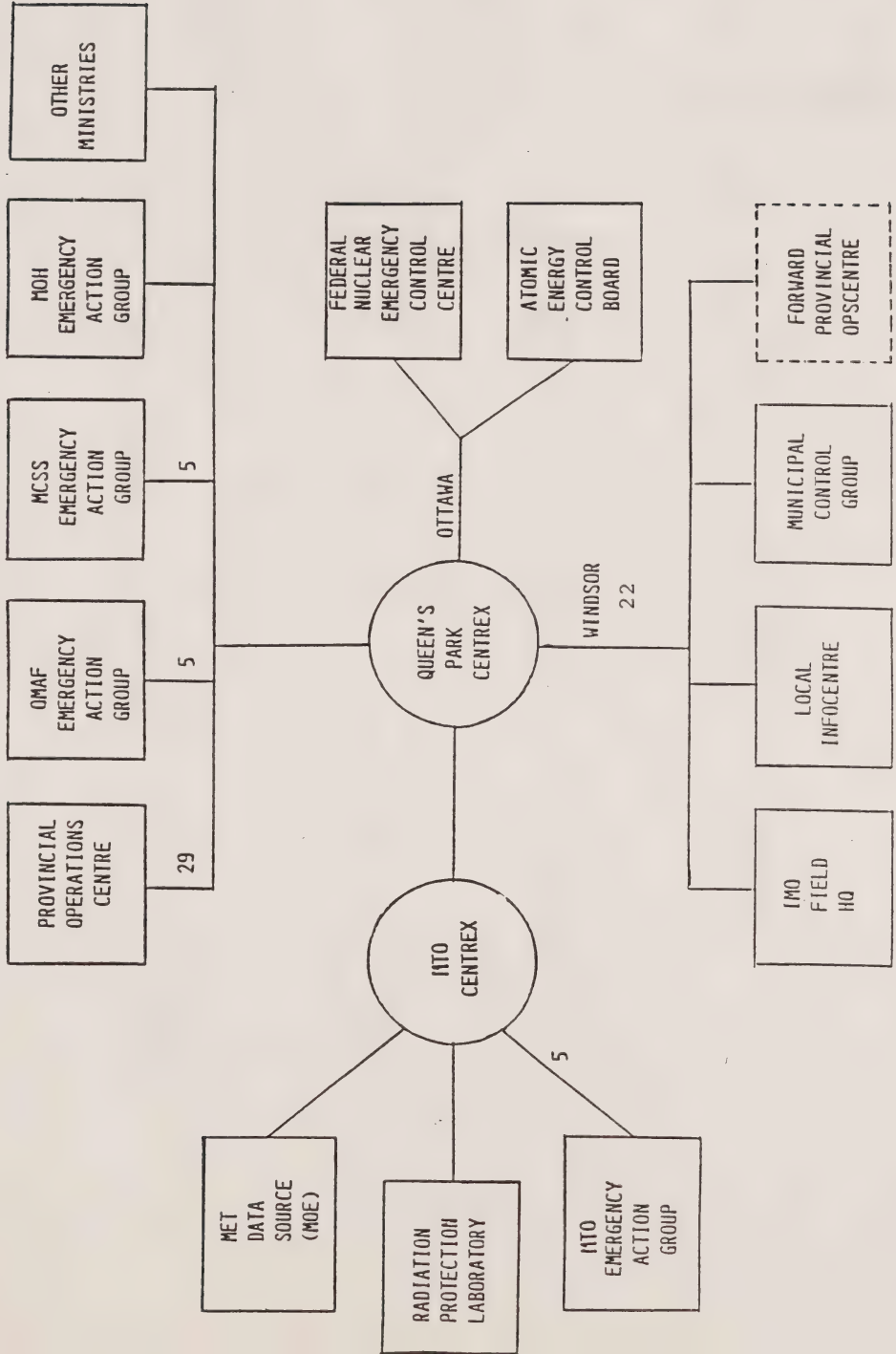
1. Povincial Operations Centre : OPP General Headquarters  
90 Harbour Street  
Toronto
2. Provincial Information Centre: 700 University Avenue  
Toronto
3. Forward Provincial Operations Centre : Ontario Government Building  
250 Windsor Avenue  
Windsor
4. Emergency Action Group OMAF : 801 Bay Street  
Toronto
5. Emergency Action Group MCSS : 6th Floor  
Hepburn Block  
80 Grosvenor St.  
Toronto
6. Emergency Action Group MTO : Communications Centre  
East Building  
1201 Wilson Avenue  
Downsview
7. Radiation Laboratory : MOL Radiation Protection  
Laboratory  
81 Resources Road  
Weston
8. Field Headquarters IMO  
Forward RV : Site A  
  
Site A : MTO Road Depot  
Harrow  
  
Site B : Sports Field  
Malden Centre  
  
Site C : Boblo Car Park  
Amherstburg
9. Joint Municipal Operations Centre : Anderdon Township Municipal  
Building  
Anderdon

10. Local Information Centre : Anderdon Public School  
Anderdon
11. Traffic Control Centre : Anderdon Township Works Department  
Anderdon
12. Reception & Evacuee Centres :
- RCEC1 : Harrow District High School  
(Reception Centre)  
Harrow Arena & Fairgrounds  
(Evacuee Centre)  
Harrow
- RCEC2 : Sandwich Secondary School  
Malden Road  
Sandwich West
13. Supplementary Evacuee Centres
- EC1 : Harrow Senior Public School  
Harrow
- EC2 : Sandwich West Elementary  
School  
2055 Wyoming  
Sandwich West
- EC3 : Sacred Heart School  
LaSalle
14. Exposure Control/  
Decontamination Units
- ECDU1 : Harrow District High School  
Harrow
- ECDU2 : Sandwich Secondary School  
Sandwich West
15. Michigan State Emergency  
Operations Centre(SEOC) : Knapps Office Centre, Suite 300  
300 S. Washington Square  
Lansing, Michigan
16. Michigan Joint Public  
Information Centre (JPIC) : Monroe County Community  
College  
1555 South Raisinville Road  
Monroe, Michigan

APPENDIX 7  
(Ref: Section 2.9)

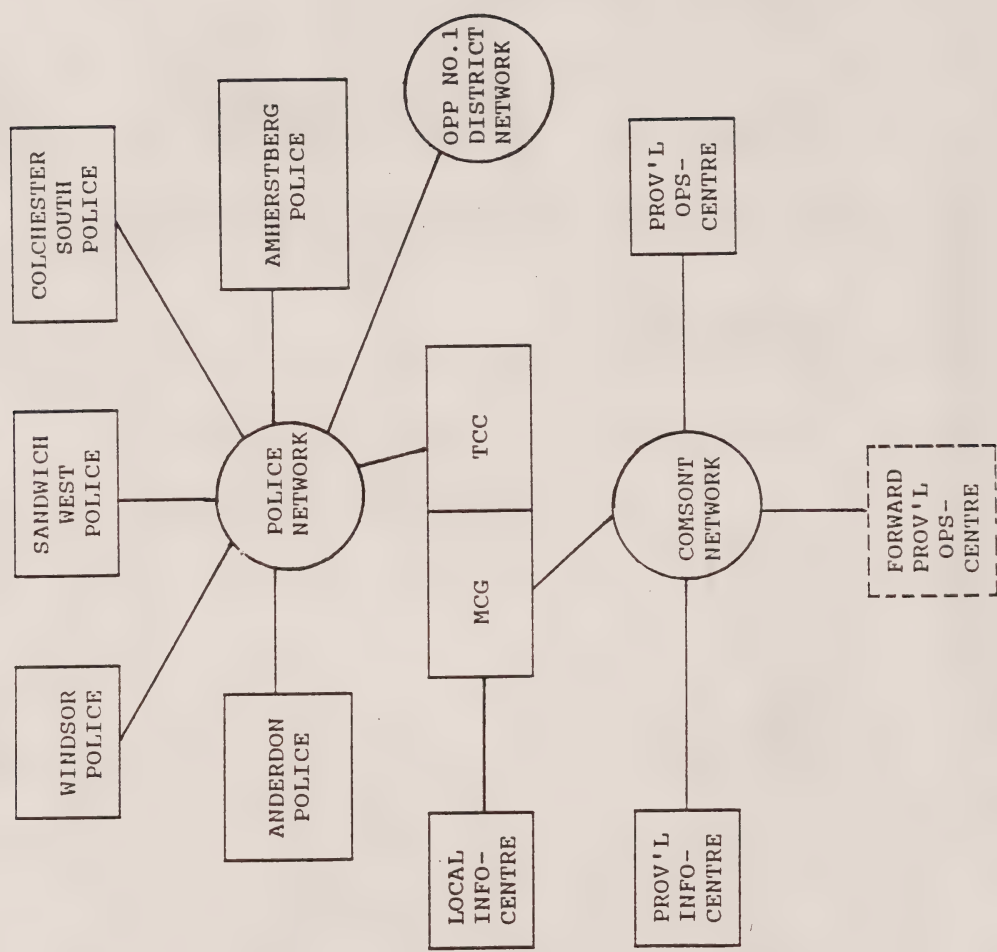
TELECOMMUNICATIONS

1. All emergency centres and facilities are linked through the normal Bell telephone system.
2. Additional telecommunication links available are shown as follows:
  - Annex A - Ontario Government Private Telephone Network
  - Annex B - Radio Links





# RADIO LINKS



APPENDIX 8  
(Ref: Section 4.6)

ONTARIO LIAISON TEAM

Annex A - Ontario Liaison Team

Annex B - Helicopter Landing Site - Monroe

Annex C - Helicopter Landing Site - Lansing

ONTARIO LIAISON TEAM (OLT)

1.0 Role

Upon receipt of a Site Area Emergency or General Emergency notification, an Ontario Liaison Team (OLT) shall be dispatched to the State of Michigan, and shall perform the following role:

- (a) Maintain close liaison with U.S. State, Federal and nuclear utility authorities, and obtain from them the required information and data.
- (b) Transmit all relevant information to the Municipal and Provincial authorities in Ontario (which the latter will transmit, as appropriate, to the Canadian Federal authorities).
- (c) Based on assessments of the situation, direct the Municipal Control Group in Essex County to take appropriate protective action.
- (d) Recommend any other appropriate protective or operational measures to the Province.
- (e) Provide information on Ontario developments to the U.S. official agencies, and to the media in the U.S.

2.0 Composition and Location

The members of the OLT, and their normal location in Michigan will be:

Head OLT	)	
Operations Officer	)	- at Fermi 2 EOF
Technical Officer	)	
Information Officers (2)	)	- at JPIC

3.0 Functions and Responsibilities

3.1 Head, Ontario Liaison Team

The Head, Ontario Liaison Team shall have the following responsibilities:

- (a) Direct and supervise the work of the team.
- (b) Maintain liaison with U.S. Federal and State authorities functioning in the emergency area, and

with the nuclear facility, and ensure exchange of information. See section 5.0 below.

- (c) Maintain contact with the Executive Director, Provincial Operations Centre, and keep him briefed on developments. Consult with him, as appropriate.
- (d) Maintain contact, through the Provincial Representative at the MCG, with the Head, Municipal Control Group (MCG) and keep him informed of developments.
- (e) If considered necessary, arrange for one or more Radiological Emergency Teams from Enrico Fermi 2 to carry out field monitoring in the Primary Zone of Essex County (Section 4.12, page 24).
- (f) Based on information and data supplied by the nuclear facility as well as other sources, and in consultation with the Technical Officer OLT, decide on protective measures required and direct the MCG to implement them. Measures affecting lake sectors shall be communicated to the Provincial Operations Centre, which shall convey them to the Canadian Coast Guard and No. 1 District, Ontario Provincial Police.
- (g) In consultation with the Technical Officer OLT, allocate the appropriate safety status to the Response Sectors in the Primary Zone, update them as necessary, and inform all concerned.
- (h) Assign duties to any additional staff members of the OLT.

### 3.2 Operations Officer

The Operations Officer OLT shall have the following functions and responsibilities:

- (a) Assist the Head OLT in carrying out his/her responsibilities.
- (b) Operate the telecommunications links to Ontario and to the other members of the OLT.
- (c) Keep a log of events and messages.
- (d) Carry out any other tasks assigned by the Head OLT.

### 3.3 Technical Officer

The Technical Officer OLT shall have the following functions and responsibilities:

- (a) Maintain liaison with U.S. Federal, State and nuclear facility technical agencies operating in the emergency area, and obtain the required technical data and information (See Section 5.0, below).
- (b) Arrange for the availability of a portable microcomputer to generate independent dose projections.
- (c) Based on the data generated and received, together with the Protective Action Levels prescribed in the Provincial Plan, Part I, Appendix 3, recommend appropriate protective measures and sector safety status to the Head OLT.
- (d) Maintain contact with the Head, Technical Group at the Provincial Operations Centre and keep him and the Technical Group briefed on technical developments, particularly dose projections and measurements and safety status of Response Sectors. Consult with the Head, Technical Group, as and when appropriate.
- (e) Obtain from the Technical Group, in Toronto, results of any field monitoring arranged by them.

### 3.4 Senior Information Officer

The Senior Information Officer OLT shall have the following functions and responsibilities:

- (a) Keep abreast of the information being received and disseminated by the Joint Public Information Centre (JPIC), and keep the Head OLT informed.
- (b) Exchange information with the Information Group at the Provincial Operations Centre in Toronto and the Local Information Centre in Essex County on U.S. and Ontario developments.
- (c) Consult with the Director of Information at the Provincial Operations Centre and the Head OLT, as and when appropriate.



- (d) Answer all media queries at the JPIC related to Ontario developments.
- (e) Before issuing any formal statement, or whenever considered appropriate for other news releases, obtain the prior approval of the Director of Information and the Head OLT.

### 3.5 Information Officer

The Information Officer OLT shall have the following functions and responsibilities:

- (a) Assist the Senior Information Officer in carrying out his/her responsibilities.
- (b) Operate the telecommunication links to the Provincial OpsCentre, the Local InfoCentre and the Head OLT.
- (c) Under the direction of the Senior Information Officer, produce written copy as required.
- (d) Carry out any other tasks assigned by the Senior Information Officer.

### 3.6 Alternate Head OLT

- (a) Notify the relief personnel for each position on the OLT.
- (b) Make necessary travel arrangements for the OLT relief complement, and inform all concerned (see section 4.0 below).
- (c) When in the OLT location, assume responsibility for OLT administration and coordination, besides acting as relief for the Head OLT.

## 4.0 Movement Plan - OLT

- 4.1 The OLT is required to proceed to Michigan by fastest means available. Possible means of transportation are:
  - (a) OPP helicopter
  - (b) Ontario Government fixed wing aircraft

4.2 To arrange for the OPP helicopter, the following should be contacted:

(a) Working hours: Field Coordination Branch  
(965-4890)

(b) Other times : Duty Officer (965-5751)

4.3 To arrange for the Government aircraft, contact the Ministry of Natural Resources representative on the Provincial Operations Group.

4.4 The aircraft are based as follows:

(a) OPP helicopter:

Helicopter Section  
Training Branch  
Provincial Police Academy  
Brampton, Ontario

(b) Government aircraft:

Field Aviation  
Pearson International Airport  
Toronto

4.5 Landing sites in Michigan are as follows:

Monroe

(a) Helicopter - Parking lot of Erie State Police Post  
(marked on map at Annex B, page 64).

(b) Aircraft - Municipal airport, Monroe  
- Custer airport, Monroe  
- Marshall airport, Monroe

Lansing

(a) Helicopter - Capital City Airport  
- MSP Headquarters Complex  
(marked on map at Annex C, page 65).

(b) Aircraft - Capital City Airport

4.6 The Head OLT shall inform Michigan State Police of the landing site(s) being used and the estimated time of arrival so that transportation can meet the team when it

lands. In cases where the helicopter is being used, the helipad will also need to be cleared before the helicopter lands.

- 4.7 Arrangements have been made by the Michigan State authorities to waive U.S. Immigration and Customs formalities for the OLT.
- 4.8 The relief complement of the OLT should normally follow by commercial aircraft though, if this should entail undue delay, special arrangements shall be made.

## 5.0 Liaison with U.S. Federal Agencies

- 5.1 The Ontario Liaison Team (OLT) in Michigan will need to maintain contact with, and obtain data and information from, elements of the following U.S. Federal agencies operating in the emergency area:

Nuclear Regulatory Commission (NRC)  
Department of Energy (DOE)

## 5.2 Nuclear Regulatory Commission (NRC)

- 5.2.1 When a Site Area or General Emergency is declared by the plant, the NRC will dispatch a Site Team to the plant under a Regional Administrator acting as Site Team Leader. During this initial activation stage, the focus of NRC operations will be at its headquarters in Washington.
- 5.2.2 When the situation warrants it, the NRC will enter an expanded activation stage. A Director of Site Operations will be nominated with specific authority. The focus of operations will now shift to the site from headquarters.
- 5.2.3 The OLT shall maintain close liaison with the NRC Site Team Leader/Director of Site Operations and staff with a view to:
  - (a) Having an independent source of information on plant actions, conditions, and prognosis.
  - (b) Where appropriate, influencing plant actions that may have negative offsite effects in Ontario.

5.3 Department of Energy (DOE)

- 5.3.1 DOE is responsible for providing and co-ordinating offsite radiological monitoring and assessment support to state and local governments. If the situation warrants it, DOE will establish a Federal Radiological Monitoring and Assessment Centre (FRMAC) in the emergency area.
- 5.3.2 The OLT shall maintain close liaison with the FRMAC with a view to:
  - (a) Obtaining the results of the monitoring and assessment work being carried out by the Centre.
  - (b) If Ontario and Canadian Federal authorities decide to obtain monitoring assistance from the FRMAC, arranging for its provision.

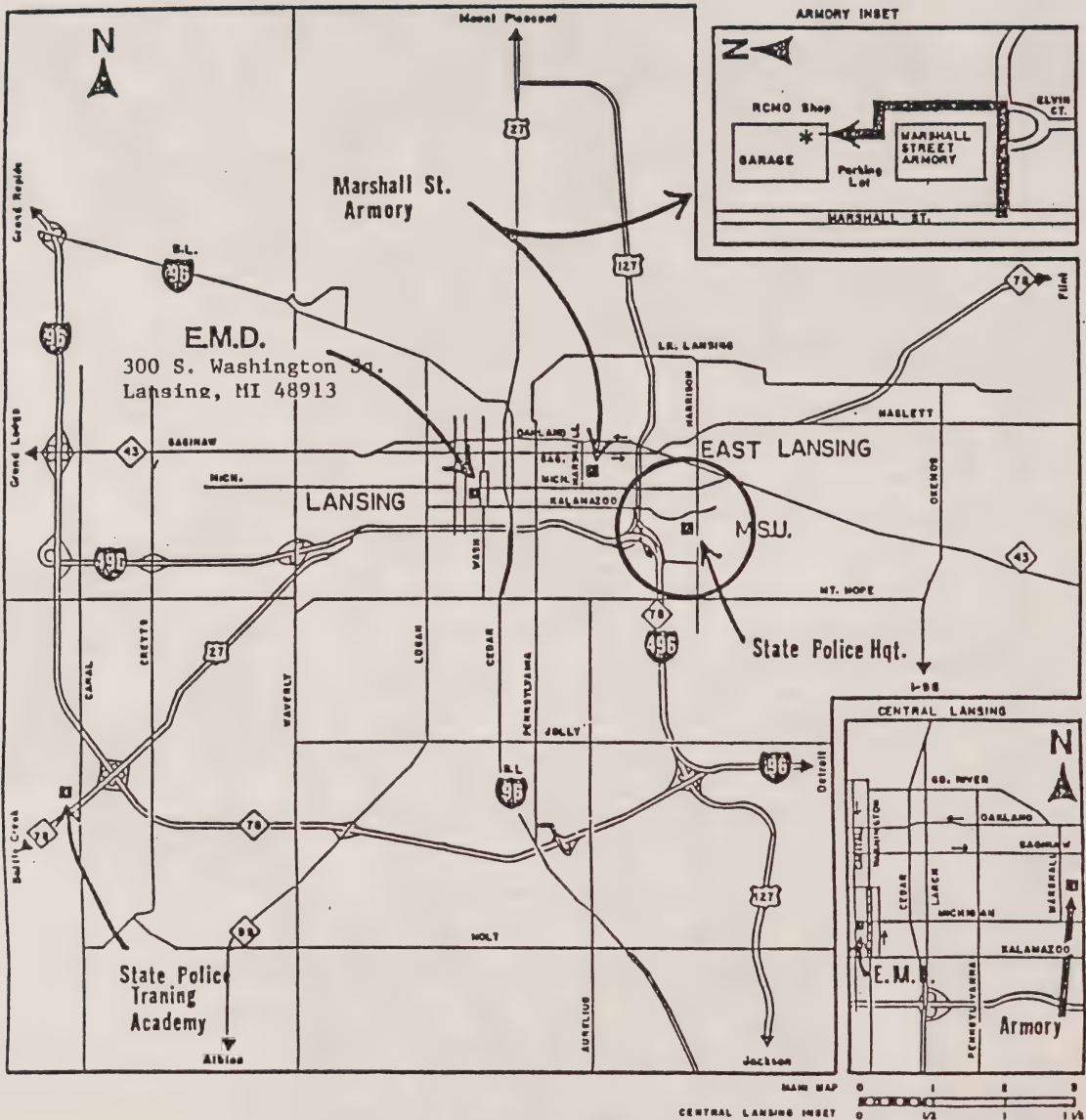


HELICOPTER LANDING SITE - MONROE





HELICOPTER LANDING SITE - LANSING



Provincial Notification Procedures and Lists

1. Appended in the following annexes:

Annex A - Notification Procedure

Annex B - Notification List #1 - Initiation of  
Notification

Annex C - Notification List #2 - Operations Group

Annex D - Notification List #3 - Technical Group

Annex E - Notification List #4 - External Notification

Annex F - Notification List #6 - Ontario Liaison Team

2. Other Provincial notification lists will be found in other documents as shown:

Notification Lists #7-9 - In Emergency Information  
(Information Organization) Procedures

Notification List #10 - In Ingestion Monitoring  
(Ingestion Monitoring Organization Procedural Manual  
Organization)

## NOTIFICATION PROCEDURE

### 1.0 Initiation of Notification

The Coordinator, Emergency Planning Ontario, and his staff shall undertake the required authentication before initiating the fan-out notification procedure.

### 2.0 Fan-out Procedure

The recipient of a notification message shall record the message, and if applicable, shall use the appropriate notification list to continue the notification as follows:

- (a) Call the person whose name appears first in the box or boxes directly connected to your box by directional arrows, identify yourself and dictate the message exactly as received by you.
- (b) If the named individual cannot be contacted, or cannot comply with the message, call the second person named in that box, and repeat the process. If necessary, go down to the third name in the box.
- (c) If none of the persons in a box are available or able to comply, then proceed to the next box(es) so as to ensure the continued propagation of the fan-out.
- (d) In case of (c) above (i.e. a missed out box), or if any other unforeseen complication arises, inform the person shown on the top of your notification list as the Facilitator.
- (e) If any recipient of a notification message has reason to doubt the validity of the message received, he or she should authenticate it by calling back the person preceding them in the chain, or any other person in the chain known to them.

### 3.0 Action on Being Notified

- 3.1 The action to be taken upon receipt of a notification message depends upon whether it activates the plan or places it on standby, as described below.

### 3.2 Activation

In this case the action required is:

- (a) The plans/procedures of all organizations covered by the Provincial Plan shall be immediately activated.
- (b) Individuals shall immediately report to their assigned place of duty, or the prescribed place of assembly of their organization.
- (c) If any plan/procedure calls for certain actions to be automatically taken upon activation of the plan (e.g., as in Table 1, page 26), then the individuals responsible shall commence implementation of these actions.

### 3.3 Standby

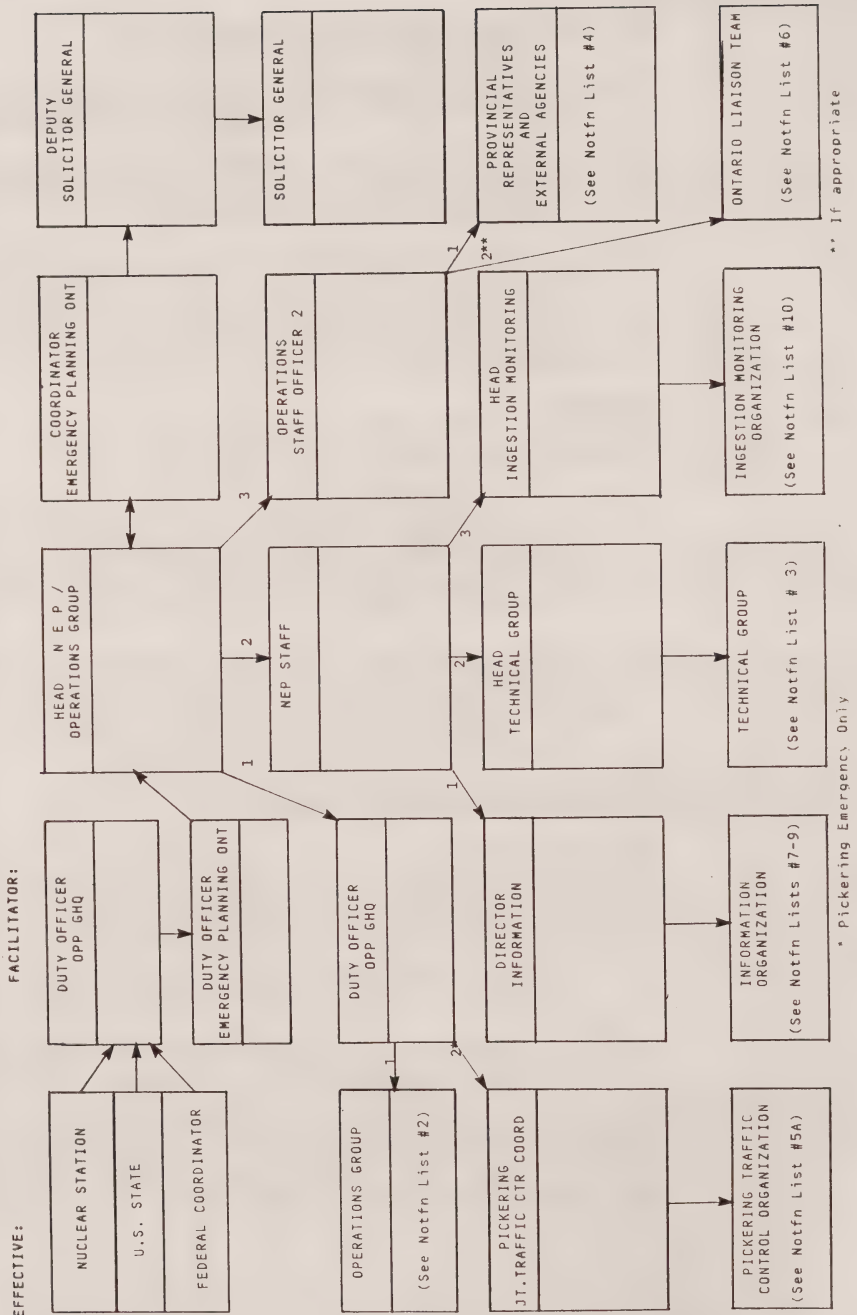
In this case the required action is:

- (a) All individuals notified shall remain available at their offices or homes, as appropriate. If they leave either, they shall inform the person preceding them in the notification chain of the new telephone number at which they can be contacted.
- (b) When any plan/procedure requires certain actions to be automatically taken upon a standby directive (e.g., as in Table 1, page 26), then the individuals responsible shall commence implementation of these actions.

### 4.0 Responsibility of the Facilitator

- 4.1 The Facilitator for a notification list is responsible for the completion of the fan-out for that list. If any report is received of a breakdown in the fan-out, the Facilitator shall take appropriate action, e.g.:
  - (a) If a box has been missed out (2.0 (d) above), keep trying to contact one of the persons in the box.
  - (b) If the chain of calls is broken, take over and complete notifications to the end of that chain.
- 4.2 Whenever notified of a problem during a notification fan-out, the Facilitator shall, after dealing with it, report it and the action taken to the Deputy Head of the Operations Group (or an Operations Staff Officer).

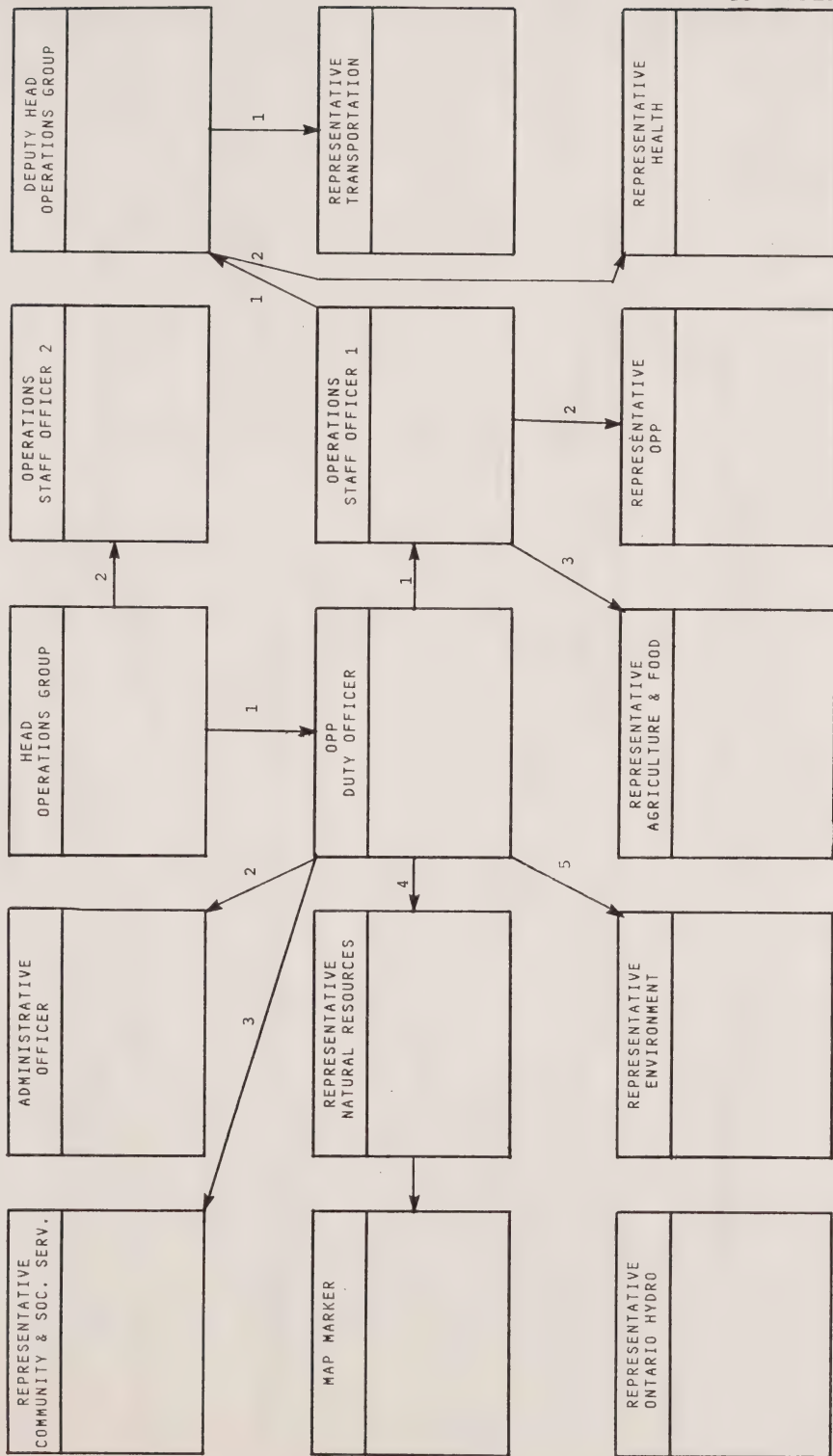
PROVINCIAL NOTIFICATION LIST #1 - INITIATION OF NOTIFICATION



PROVINCIAL NOTIFICATION LIST #2 - OPERATIONS GROUP

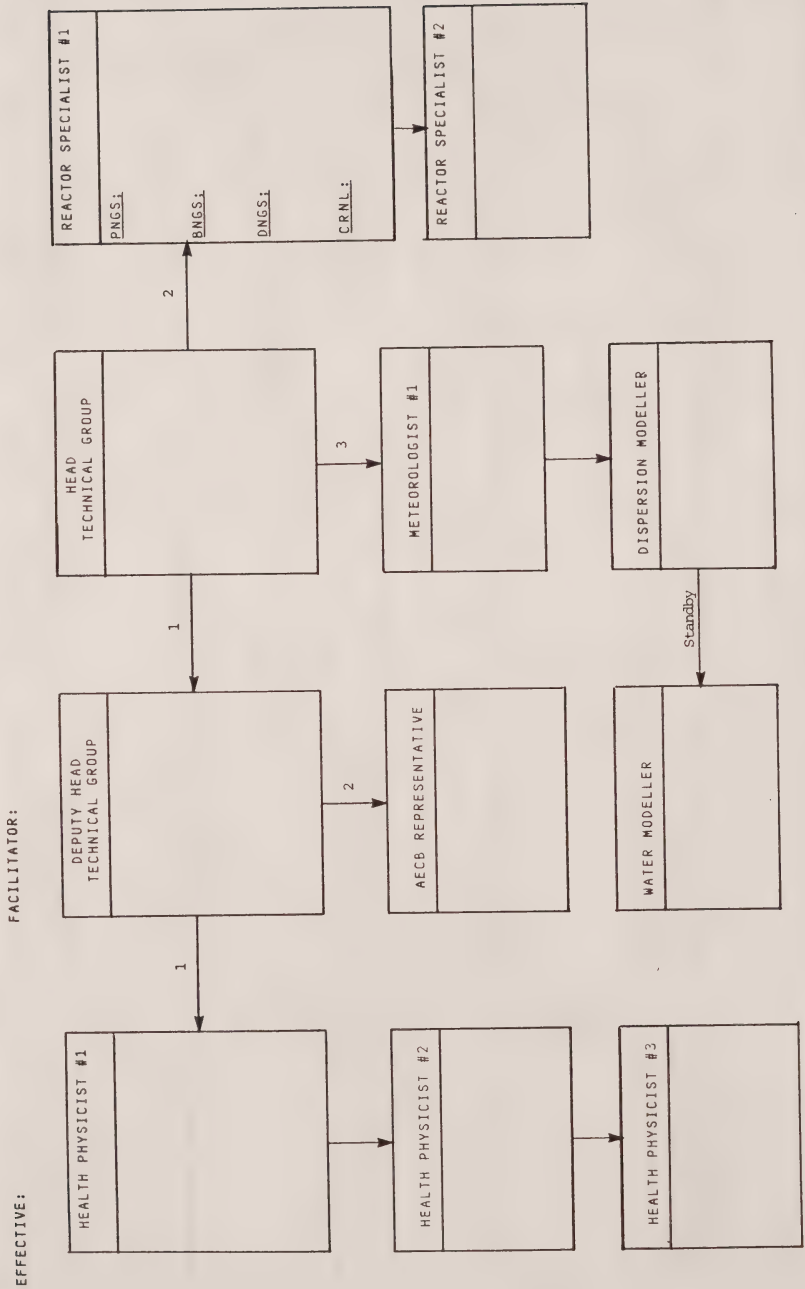
EFFECTIVE:

FACILITATOR:





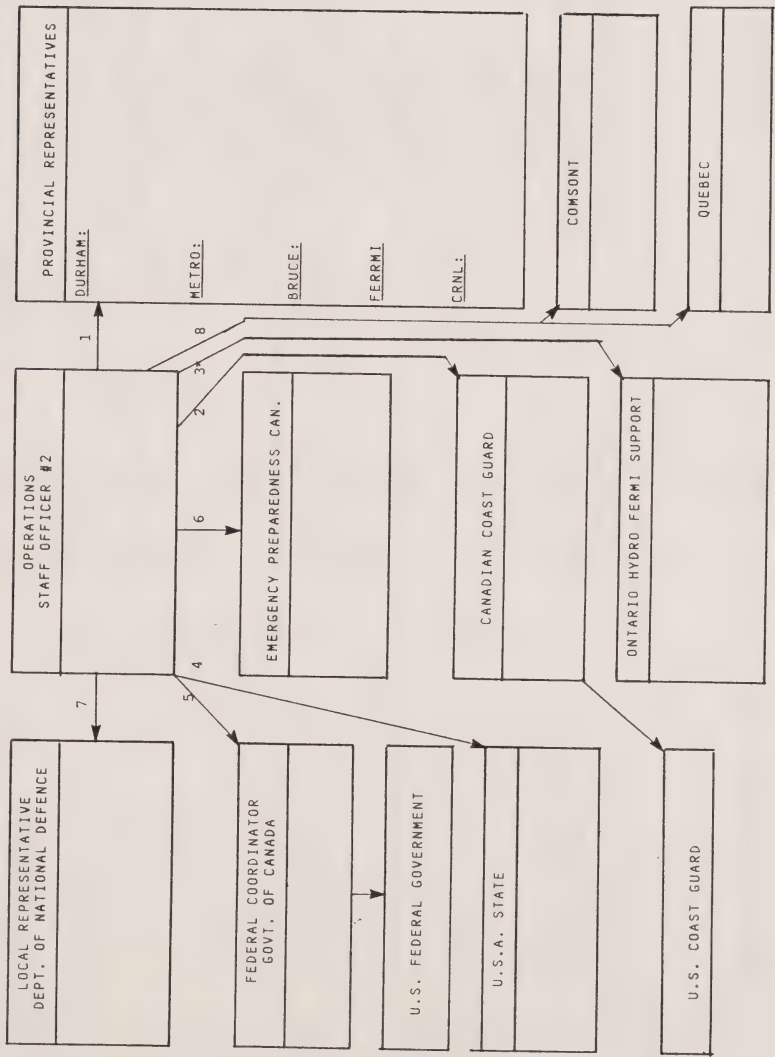
PROVINCIAL NUCLEAR EMERGENCY PLAN  
PROVINCIAL NOTIFICATION LIST #3 - TECHNICAL GROUP



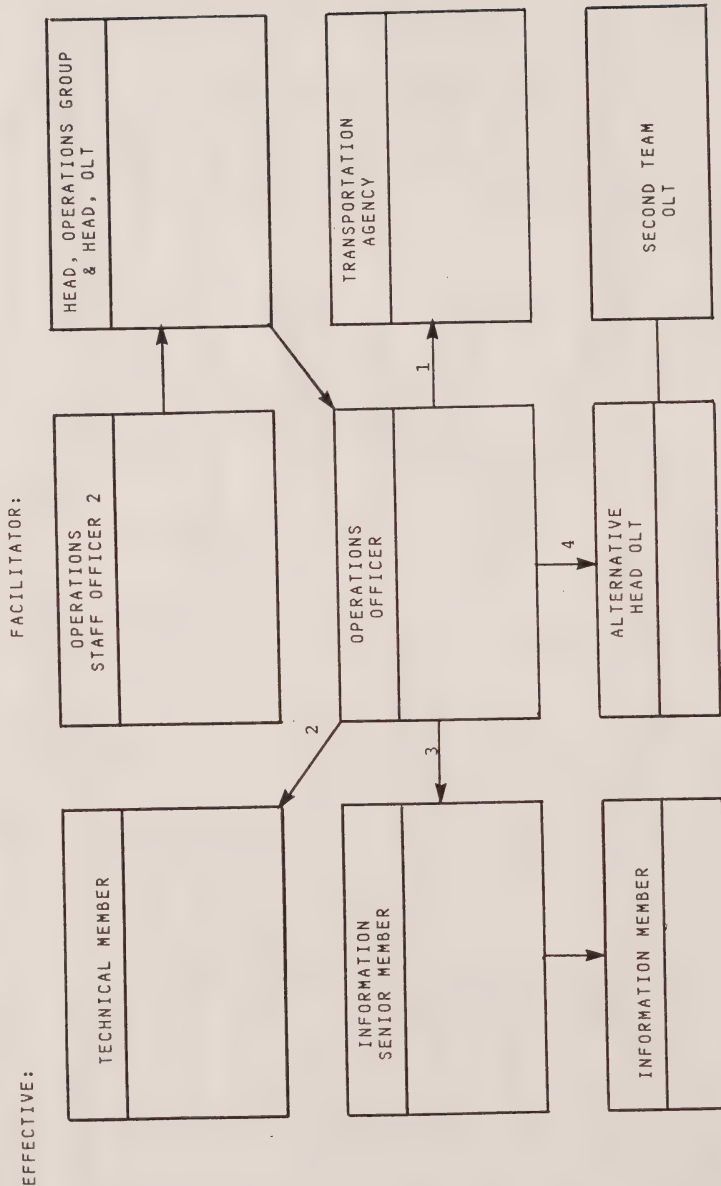
PROVINCIAL NUCLEAR EMERGENCY PLAN  
PROVINCIAL NOTIFICATION LIST #4  
PROVINCIAL REPRESENTATIVES & EXTERNAL AGENCIES

EFFECTIVE:

FACILITATOR:



PROVINCIAL NUCLEAR EMERGENCY PLAN  
PROVINCIAL NOTIFICATION LIST #6 - ONTARIO LIAISON TEAM



EFFECTIVE:

APPENDIX 10  
(Ref: Section 4.12.2)

REVENUE CANADA CUSTOMS AND EXCISE  
GOODS FOR EMERGENCY USE REMISSION ORDER

Appended in the following Annexes:

Annex A - Instructions

Annex B - Contact List - Revenue Canada Customs and Excise,  
Windsor Region

Annex C - Goods For Emergency Use Remission Order

INSTRUCTIONS

1.0 Introduction

- 1.1 Revenue Canada, Customs and Excise, Memorandum D8-1-6 (referred to as the GOODS FOR EMERGENCY USE REMISSION ORDER), authorizes the Deputy Minister of National Revenue for Customs and Excise to permit entry into Canada of goods to be used temporarily for an emergency. The Order requires that any goods so imported and not consumed or destroyed during the emergency be exported when no longer required.
- 1.2 Implementation authority has been assigned to representatives of the Deputy Minister and general instructions are in the hands of Customs representatives across Canada (see Annex B). These representatives are authorized to act quickly, but may require means of clarifying the bona fides of particular situations.

2.0 Procedure

- 2.1 Whenever Radiological Emergency Teams (RETs) are to be despatched from Fermi 2 to Essex County for the purposes of carrying out field monitoring in the Primary Zone, Emergency Planning Ontario or the Provincial Operations Centre shall inform the Canadian Customs authorities to invoke the provisions of the Goods for Emergency Use Remission Order as indicated below:
  1. Chief, Remissions, Rulings and Appeals  
Windsor Region  
  
or, his/her alternate:
  2. Remissions Officer  
Windsor Region
- 2.2 Annex B lists the contact phone numbers and addresses for the above-noted individuals.

ANNEX B  
to APPENDIX 10

CONTACT LIST

REVENUE CANADA  
CUSTOMS AND EXCISE  
WINDSOR REGION

1. Ed Shamess  
Chief, Remissions, Rulings and Appeals  
Customs and Excise  
420 Devonshire Road  
Windsor, Ontario  
N8Y 4T6

Bus: 519-973-8553

Res: 519-969-7940

2. Brian Maclean  
Remissions Officier  
Customs and Excise  
420 Devonshire Road  
Windsor, Ontario  
N8Y 4T6

Bus: 519-973-8518

Res: 519-736-4936



Revenue Canada  
Customs and ExciseRevenu Canada  
Douanes et Accise

## MEMORANDUM D8-1-6

Ottawa, June 1, 1986

Ottawa, le 1<sup>er</sup> juin 1986

## SUBJECT

GOODS FOR EMERGENCY  
USE REMISSION ORDER

This Memorandum outlines the conditions under which a remission may be granted on goods for emergency use.

## Regulations

ORDER RESPECTING THE REMISSION OF  
CUSTOMS DUTIES AND EXCISE TAXES ON  
GOODS FOR USE IN CASES OF EMERGENCY

## Short Title

1. This Order may be cited as the *Goods for Emergency Use Remission Order*.

## Remission

2. Subject to section 3, remission is hereby granted of all customs duty and excise taxes payable under the *Customs Tariff* and the *Excise Tax Act* on goods temporarily imported into Canada that, in the opinion of the Deputy Minister of National Revenue for Customs and Excise, are goods required for an emergency.

3. All goods on which remission is granted pursuant to section 2, except goods that are consumed or destroyed during the emergency referred to in that section shall, when they are no longer required, be exported from Canada.

GUIDELINES AND  
GENERAL INFORMATION

1. For the purpose of this Order, an emergency is defined as an abnormal event that threatens the loss of human life and/or destruction of property, the environment or the peace or security of a community, area or the nation and is in the opinion of the representative of the Deputy Minister of Customs and Excise located at or nearest to the scene to be beyond the capability of

## OBJET

DÉCRET DE REMISE À L'ÉGARD DE MARCHANDISES  
DEVANT ÊTRE UTILISÉES DANS DES CAS D'URGENCE

Le présent mémorandum décrit les conditions en vertu desquelles une remise peut être accordée à l'égard de marchandises devant être utilisées dans des cas d'urgence.

## Règlement

DÉCRET CONCERNANT LA REMISE DES  
DROITS DE DOUANE ET DES TAXES D'ACCISE SUR  
LES MARCHANDISES DEVANT ÊTRE UTILISÉES  
DANS DES CAS D'URGENCE

## Titre abrégé

1. Le présent décret peut être cité sous le titre: *Décret de remise à l'égard de marchandises devant être utilisées dans des cas d'urgence*.

## Remise

2. Sous réserve de l'article 3, remise est accordée des droits de douane et des taxes d'accise payables en vertu du *Tarif des douanes* et de la *Loi sur la taxe d'accise* sur les marchandises importées temporairement au Canada qui de l'avis du sous-ministre du Revenu national pour les douanes et l'accise, sont des marchandises requises pour parer à une urgence.

3. Toutes les marchandises à l'égard desquelles il est accordé remise aux termes de l'article 2, sauf les marchandises qui sont consommées ou détruites lors d'une urgence mentionnée audit article, doivent être exportées hors du Canada lorsqu'elles ne sont plus requises.

LIGNES DIRECTRICES ET  
RENSEIGNEMENTS GÉNÉRAUX

1. Aux fins du présent décret, un cas d'urgence est défini comme étant un événement anormal qui peut causer la perte de vies humaines et (ou) détruire la propriété, l'environnement ou la paix ou la sécurité d'un groupe de personnes, d'un secteur ou de la nation et contre lequel, de l'avis du représentant du sous-ministre des Douanes et de l'Accise qui se trouve sur place ou à l'endroit

local manpower, equipment or material resources to effectively cope with the situation. Such emergencies may arise as a result of accidents, sabotage or a natural disaster and could take the form of fires, floods, earthquakes, landslides, insurrections, wrecks and spills or releases of toxic and destructive material or petroleum products.

2. Generally emergencies will be proclaimed by officials of Federal, Provincial or Municipal Governments. However, there will be instances when time will not permit the issuance of an official notice and Customs Officers will have to assess the situation as it develops. While the appraisal of an emergency situation will more directly involve Customs Officers at the Customs point of importation, these officers shall, if time permits, consult with senior Customs Officers at the regional level or at Headquarters. Should any doubt exist as to the bona fides of the situation, clarification can be sought from local civil defence groups, police or fire departments, etc.

3. The urgency of the situation will determine the immediate action of Customs Officers at the place of importation of the goods. Since it must be appreciated that if an item of equipment is required to be placed on site as quickly as possible, the Customs Officers at the Customs point of importation should expedite clearance with a minimum of delay. Wherever possible a simple blatter record on form E 29B, without security, should be made describing in very general terms the item or goods crossing the frontier. The issuance of form E 29B can be made at time of importation into Canada or after the fact depending on the circumstances. This record can be cancelled whenever an official or responsible person involved can provide evidence that the items have been expended in resolving the emergency or have been exported from Canada.

4. In cases where the emergency situation requires release of goods at places where Customs Officers or R.C.M.P. are not in attendance, a record of a responsible individual such as a Chief of Police, a Municipal Mayor, a representative of the Provincial Government or other individuals charged with responsibility of directing the emergency counter measures will be accepted for the purpose of completing form E 29B.

le plus rapproché, les effectifs, l'équipement ou les moyens matériels de l'endroit ne peuvent combattre de façon efficace. Ces cas d'urgence peuvent survenir à la suite d'accidents, de sabotage ou d'un désastre naturel et peuvent prendre la forme d'incendies, d'inondations, de tremblements de terre, de glissements de terrain, d'insurrections, de naufrages et de fuites ou d'échappements de matières toxiques et destructrices ou de produits du pétrole.

2. Généralement, les cas d'urgence seront proclamés par des représentants du gouvernement fédéral, des gouvernements provinciaux ou municipaux. Cependant, il y aura des cas où le temps ne permettra pas d'émettre un avis officiel et les agents des douanes devront évaluer la situation à mesure que se dérouleront les événements. Bien que l'évaluation d'une situation d'urgence concerne plus directement les agents des douanes au point d'importation, ces agents doivent, si le temps le permet, consulter des agents supérieurs au niveau régional ou à l'Administration centrale. S'il y a des doutes concernant le sérieux de la situation, des éclaircissements pourront être demandés au groupe de protection civile, au service de police ou au service des incendies de l'endroit, etc.

3. Une situation d'urgence entraînera des mesures immédiates des agents des douanes au lieu d'importation des marchandises. Comme il faut admettre qu'une pièce d'équipement doit être placée sur les lieux aussi rapidement que possible, les agents des douanes du point d'importation devront effectuer le dédouanement dans les plus brefs délais possibles. Toutes les fois que cela est possible, une simple inscription à la main sur une formule E 29B sans garantie, devra être faite et elle décrira en termes généraux l'article ou les marchandises qui traversent la frontière. La formule E 29B peut être délivrée lors de l'importation au Canada ou après, suivant les circonstances. Cette inscription peut être annulée lorsqu'un fonctionnaire ou une personne responsable concerné(e) peut fournir la preuve que les articles ont été dépensés pour résoudre le cas d'urgence ou ont été exportés hors du Canada.

4. Dans les cas où la situation d'urgence exige la mainlevée des marchandises à des endroits où il n'y a pas d'agents des douanes ou de représentant de la G.R.C., une inscription d'une personne responsable, comme par exemple, le chef de la police, le maire d'une municipalité, un représentant du gouvernement provincial ou d'autres personnes ayant la responsabilité de diriger les mesures d'urgence, sera acceptée aux fins de l'établissement de la formule E 29B.

5. With respect to section 3 of the Order, goods consumed or destroyed in Canada can be documented on the casual revenue type of accounting document as a remission claim. For those articles which are returned abroad, proof of export can be confirmed by cancellation of the relevant form E 29B or the acceptance of an Identification of Goods Exported or Destroyed, form E 15 in lieu thereof. An official or responsible person mentioned in paragraphs 3 and 4 of this Memorandum, who is aware of the circumstances, may be expected to sign the relative accounting documents.

6. All Customs documents relating to goods for which remission has been claimed in accordance with this Order are to bear the number of this Order in Council (see legislative references).

#### Customs Procedures

7. The procedures set out in this Memorandum have the approval and support of the Department of Manpower and Immigration. In this respect, liaison with officers of that department is encouraged and assistance of their officers, particularly with respect to entry of personnel of the emergency organizations, may relieve Customs Officers of the responsibility for primary immigration duties so that they may apply themselves to other urgent matters. It is also desirable, where possible, to ensure that responsible officials of the Department of Manpower and Immigration be kept advised with respect to such transborder movements.

8. A copy of each accounting document or claim for remission passed under the authority of this Order is to be forwarded by the Customs office concerned to the Regional Chief Officer of Customs for the attention of the Drawbacks, Refunds and Remissions Unit.

5. Relativement à l'article 3 du décret, les marchandises consommées ou détruites au Canada peuvent être inscrites sur un document de déclaration pour les recettes occasionnelles comme une demande de remise. Quant aux articles qui sont retournés à l'étranger, la preuve d'exportation peut être donnée par l'annulation de la formule E 29B appropriée ou par l'acceptation de l'Identification des marchandises exportées ou détruites, formule E 15. On peut s'attendre à ce qu'un fonctionnaire ou une personne responsable mentionné(e) dans les paragraphes 3 et 4 de ce mémorandum, qui connaît les circonstances, signe les documents de déclarations pertinents.

6. Tous les documents de douane qui s'appliquent aux articles à l'égard desquels une remise a été demandée en conformité au décret doivent inclure le numéro du décret (voir les références légales).

#### Procédures de douane

7. Les procédures décrites dans ce mémorandum ont reçu l'approbation et l'appui du ministère de la Main-d'oeuvre et de l'immigration. À ce sujet, nous encourageons les rapports avec les agents de ce ministère, l'aide de ses agents, particulièrement en ce qui a trait à l'entrée du personnel des organismes d'urgence, peut dégager les agents des douanes de la responsabilité des fonctions premières relatives à l'immigration de façon à ce qu'ils puissent s'employer à d'autres affaires urgentes. Il est également souhaitable, lorsque c'est possible, de s'assurer que les fonctionnaires responsables du ministère de la Main-d'oeuvre et de l'immigration soient tenus au courant de ces mouvements de passage à la frontière.

8. Une copie de chaque document de déclaration ou demande de remise acceptée sous l'autorité de ce décret, doit être envoyée par le bureau de douane concerné à l'agent régional en chef des douanes à l'attention de l'Unité des drawbacks, remboursements et remises.



APPENDIX 11

CONVERSION CHART

DISTANCE

Imperial	Metric	Metric	Imperial
1 inch =	2.540 centimetres	1 centimetre =	0.3937 inch
1 foot =	0.3048 metre	1 decimetre =	0.3281 foot
1 yard =	0.9144 metre	1 metre =	3.281 feet
1 rod =	5.029 metre	1 metre =	1.094 yard
1 mile =	1.609 kilometres	1 decametre =	10.94 yards
		1 kilometre =	0.6214 mile

TEMPERATURE

Conversion F to C

- Subtract 32
- Divide by 1.8

Example 80°F:  $80 - 32 = 48$   
 $48 \div 1.8 = 26.66^{\circ}\text{C}$

Conversion C to F

- Multiply by 1.8
- Add 32

Example 27°C:  $27 \times 1.8 = 48.6$   
 $48.6 + 32 = 80.6^{\circ}\text{F}$

AREA

Imperial to Metric

1 square inch	=	6.452 square centimetres
1 square foot	=	0.093 square metre
1 square yard	=	0.836 square metre
1 acre	=	0.405 hectare*
1 square mile	=	259.0 hectares
1 square mile	=	2.590 square kilometres

Metric to Imperial

1 square centimetre	=	0.155 square inch
1 square metre	=	10.76 square feet
1 square metre	=	1.196 square yard
1 hectare	=	2.471 acres
1 square kilometre	=	0.386 square mile

\*1 hectare = 1 square hectometre

### WEIGHT

#### Imperial to Metric

1 ounce (troy)	=	31.103 grams
1 ounce (avoir)	=	28.350 grams
1 pound (troy)	=	373.242 grams
1 pound (avoir)	=	453.592 grams
1 ton (short)	=	0.907 tonne*

#### Metric to Imperial

1 gram	=	0.032 ounce (troy)
1 gram	=	0.035 ounce (avoir)
1 kilogram	=	2.679 pounds (troy)
1 kilogram	=	2.205 pounds (avoir)
1 tonne	=	1.102 ton (short)

\*1 tonne = 1000 kilograms

### VOLUME

#### Imperial to Metric

1 cubic inch	=	16.387 cubic centimetres
1 cubic foot	=	28.317 cubic decimetres (litres)
1 cubic yard	=	0.765 cubic metre

#### Metric to Imperial

1 cubic centimetre	=	0.061 cubic inch
1 cubic decimetre	=	0.035 cubic foot
1 cubic metre	=	1.308 cubic yard







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